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ABSTRACT

This study explores the recent trend where African countries have shown a decline in expansion of their school systems and in replacing expatriates engaged in vital public and private activity. The study explores policy options and traces the evolution of World Bank ideas and actions to help practitioners design policies and programs better adapted to the challenges of African development. The volume lists the following chapters: (1) "The Problem"; (2) "History of Bank Involvement in Education in Africa"; (3) "Selected Issues in African Education"; (4) "Technical Assistance"; and (5) "Conclusions." Four tables, 9 figures, 99 references, and appendices accompany the text. (EH)

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# The World Bank's Role in Human Resource Development in Sub-Saharan Africa

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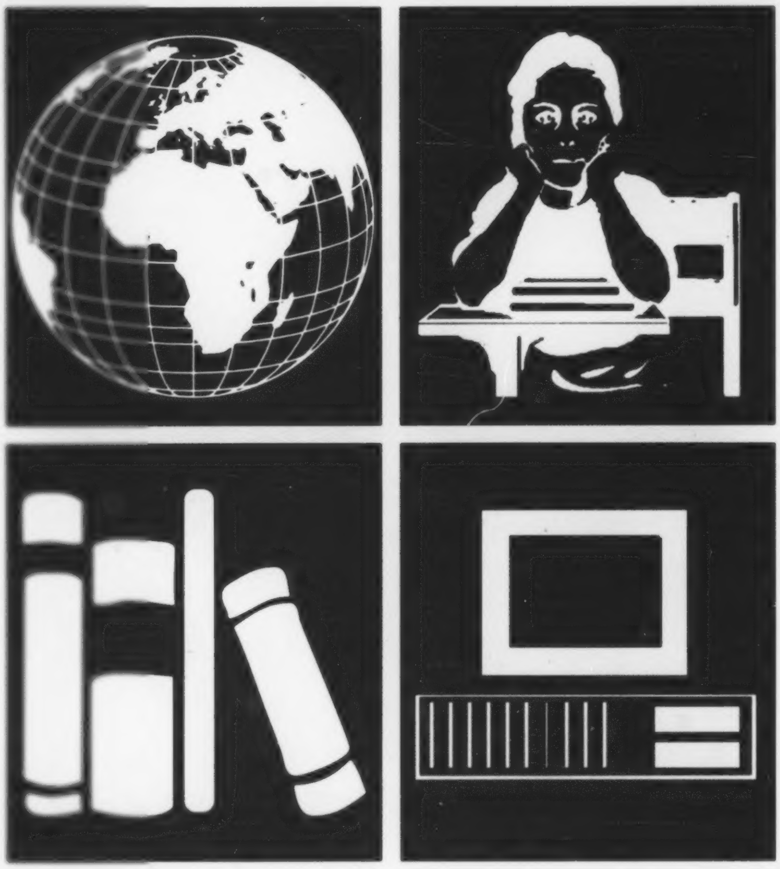

**Ronald G. Ridker**

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# The World Bank's Role in Human Resource Development in Sub-Saharan Africa

## Education, Training, and Technical Assistance

Ronald G. Ridker

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# Foreword

For several years after independence, African countries made significant progress in expanding school systems and replacing expatriates engaged in vital public and private activity. These advances slowed in the last decade and a half, and in some cases have reversed. This study explores the underlying causes of these worrisome trends.

- Early development efforts encouraged the growth of large capital- and import-intensive operations. These operations increased the demand for highly skilled personnel, which could only be met from abroad, while inhibiting the development of intermediate skill levels.

- The domestic and international labor markets for higher level skills worked in perverse ways. Particularly during the late 1970s and 1980s—a period of severe economic deterioration—these markets encouraged skilled Africans to seek employment outside their countries. At the same time, donors' provision of expatriate technical assistance personnel was not subjected to the discipline of the market, and thus raised dependency on expatriate personnel.

- The education system developed along relatively high-cost lines, which could not be sustained in the face of the economic deterioration of the 1980s.

The study considers a number of policy options—for example, in education, making greater use of fee-for-service mechanisms to encourage better performance, and, in technical assistance, using mechanisms that, in effect, correct some of the relevant market distortions. The study traces the evolution of Bank ideas and actions in these fields, and should help practitioners design policies and programs better adapted to the challenges of African development.

Robert Picciotto
Director General
Operations Evaluation
June 1994

# Prefacio

En los años posteriores a su independencia, los países africanos realizaron notables avances en la ampliación de los sistemas escolares y la sustitución de extranjeros que desempeñaban importantes actividades públicas y privadas. Estos progresos se hicieron más lentos durante los últimos 15 años y en algunos casos hubo, incluso, retrocesos. En el presente estudio se analizan las causas fundamentales de estas tendencias inquietantes.

- Las primeras iniciativas de desarrollo contribuyeron al crecimiento de las operaciones en gran escala con alto coeficiente de importaciones y capital. Estas operaciones incrementaron la demanda de personal altamente especializado, que sólo podía conseguirse en el exterior, e impidieron la formación de personal con capacitación intermedia.

- Los mercados de trabajo nacionales e internacionales para el personal con mayor nivel de capacitación ejercieron efectos nefastos. En especial a fines del decenio de 1970 y en los años ochenta —período de grave deterioro económico— estos mercados alentaron a los africanos especializados a buscar empleo fuera de sus países. Al mismo tiempo, el personal extranjero de asistencia técnica enviado por los donantes no obedecía a las reglas del mercado, lo que incrementó la dependencia del personal extranjero.

- El sistema de educación siguió una pauta de gastos relativamente altos, insostenibles ante la difícil situación económica del decenio de 1980.

En el estudio se consideran varias opciones en materia de políticas —por ejemplo, en el ámbito de la educación, fomentar el uso de mecanismos de honorarios por servicios a fin de mejorar los resultados y, en el de la asistencia técnica, utilizar métodos que corrijan efectivamente algunas de las distorsiones del mercado. El estudio expone la evolución de las ideas y acciones del Banco en estas esferas y debería servir de ayuda en la formulación de políticas y programas que se adapten mejor a las dificultades del desarrollo africano.

Robert Picciotto
Director General
Evaluación de Operaciones
Junio de 1994

# Préface

Durant plusieurs années après l'indépendance, les pays d'Afrique ont fait des progrès considérables pour développer les systèmes scolaires et remplacer le personnel expatrié occupant des fonctions essentielles dans le public et le privé. Cependant, le rythme s'est ralenti ces quinze dernières années et l'évolution s'est même parfois inversée. L'étude présentée ici examine les causes profondes de ces tendances inquiétantes.

- Initialement, les activités de développement ont encouragé la croissance de grandes entreprises capitalistiques et fortement dépendantes des importations. Leur présence a créé une plus forte demande de personnel hautement qualifié qui n'a pu être satisfaite que par l'étranger et qui a empêché l'apparition d'une main-d'oeuvre possédant des compétences de niveau intermédiaire.

- Le jeu des marchés nationaux et internationaux des compétences de niveau supérieur a produit des effets pervers. Surtout à la fin des années 70 et pendant les années 80 — qui ont correspondu à une grave détérioration de la situation économique — ces marchés ont encouragé les Africains qualifiés à rechercher des emplois hors de leur pays. Simultanément, la fourniture, par les donateurs, de personnel d'assistance technique expatrié échappait à la discipline du marché et aggravait la dépendance envers cette catégorie de personnel.

- Le système d'éducation a évolué selon un modèle relativement dispendieux qu'il a été impossible de suivre encore dans la situation économique défavorable des années 80.

L'étude passe en revue une série d'options fondamentales, parmi lesquelles, pour l'éducation, la possibilité d'utiliser plus largement les mécanismes de redevances pour services rendus afin de favoriser l'obtention de meilleurs résultats, et, pour l'assistance technique, l'introduction de mécanismes capables d'éliminer concrètement un certain nombre de distorsions dont souffre le marché. Elle retrace l'évolution des idées et des interventions de la Banque dans ces domaines, et devrait aider les praticiens à concevoir des politiques et des programmes mieux adaptés aux problèmes du développement de l'Afrique.

Robert Picciotto
Directeur général
Evaluation rétrospective des opérations
Juin 1994

# Abstract

This study examines the World Bank's role in promoting human resource development in the countries of Sub-Saharan Africa. It was motivated by concerns that progress in overcoming shortages of skilled and trained manpower seems to be disappointingly slow, despite the substantial resources devoted by both governments and donors to this effort during the last three decades. The study presents an overview of the problem and its likely causes, the efforts made to resolve it, and accomplishments since independence. It profiles the history and evolution of the Bank's involvement and selected issues in African education, technical assistance, and training efforts.

The study finds that these concerns over progress are warranted, and considers a number of policy options—for example, in education, making greater use of fee-for-service mechanisms to encourage better performance, and, in technical assistance, using mechanisms that, in effect, correct some of the relevant market distortions. It offers valuable lessons that should help practitioners design policies and programs better adapted to the challenges of African development.

# Acknowledgments

The study was undertaken by OED staff and consultants. The Task Manager and principal author is Ronald G. Ridker. Ralph Romain provided critical advice and substantial written materials, particularly for the education chapters. The statistical overview and appendix included in this study were developed by McDonald Benjamin. Pilar Barquero was responsible for production of the original manuscript and assisted with the development of statistical materials and graphs. Coralie Bryant, William Cooper, Roy Culpeper, Willis J. Nordlund, and George Stavros provided case study materials. The report benefited greatly from numerous comments and reviews by Bank operational staff and managers.

# Abbreviations and Acronyms

| | |
|---|---|
| DAC | Development Assistance Committee |
| EDI | Economic Development Institute of the World Bank |
| FSTA | Free-standing Technical Assistance |
| GDP | Gross Domestic Product |
| GNP | Gross National Product |
| HRD | Human Resource Development |
| IBRD | International Bank for Reconstruction and Development |
| IDA | International Development Association |
| IIEP | International Institute for Educational Planning |
| ILO | International Labour Organization |
| IMF | International Monetary Fund |
| LAC | Latin America and the Caribbean Regional Office |
| MCDE | Malawi College of Distance Education |
| NATCAP | National Technical Cooperation Assessment and Program of the UNDP |
| NFE | Nonformal Education |
| NGO | Nongovernmental Organization |
| ODA | Official Development Assistance |
| OECD | Organization for Economic Cooperation and Development |
| OED | Operations Evaluation Department |
| PAR | Performance Audit Report |
| PCR | Project Completion Report |
| PHN | Population, Health, and Nutrition Department |
| PIU | Project Implementation Unit |
| SAL | Structural Adjustment Loan |
| SAR | Staff Appraisal Report |
| SECAL | Sector Adjustment Loan |
| SSA | Sub-Saharan Africa |
| SW | Staffweeks |
| TA | Technical Assistance |
| TARTF | Technical Assistance Review Task Force |
| UNESCO | United Nations Educational, Scientific, and Cultural Organization |
| UNDP | United Nations Development Programme |
| UPE | Universal Primary Education |
| WID | Women in Development |

# Executive Summary

This study examines the role that the World Bank has played in promoting human resource development in the countries of Sub-Saharan Africa (SSA). It was motivated by concerns that progress in overcoming shortages of skilled and trained manpower seems to be disappointingly slow, despite the substantial resources devoted by both governments and donors to this effort during the last three decades. The study finds that these concerns are warranted. Why has this been the case? What role has the Bank played? What can be learned from past experience that might be instructive for the future?

## The Problem

Human capacities—problem-solving abilities, command of relevant factual information, and technical, managerial, and entrepreneurial skills—are acquired through education and experience (learning by doing). On both counts, African nations achieved independence with severe deficits. Alarmingly large numbers of persons had never been to school. Few had skills beyond those needed for subsistence agriculture and petty trading activities. During the last 30 years, considerable progress has been made by some countries. But overall, it has been less rapid than in other developing regions and insufficient to significantly reduce Africa's dependence on expatriates for the operation of many vital functions. Moreover, most of this progress was made during the 1960s and 1970s; during the 1980s, there have actually been some reversals. Primary enrollment rates in some countries have declined while expansion at secondary and tertiary levels has slowed. Quality of education services at all levels is believed to have deteriorated. The replacement of expatriates by Africans, which was rapid in the 1960s and early 1970s, seems to have slowed down and may have been reversed in a few instances. Particularly worrisome has been the deterioration at higher education levels where persons are trained to take leadership roles in science, technology, management, and business.

The principal, operationally relevant, causes of these problems, according to the study, are threefold. First, the character of the development process in SSA during the 1960s and 1970s did not conserve its scarcest factor of production—human capital. Quite the contrary, it encouraged the growth of large capital- and import-intensive operations and discouraged the development of small-scale private operations that would have relied on intermediate technologies. The former increased the demand for highly skilled and experienced managers and technicians, which could only be met from abroad, while the latter inhibited the acquisition of experience and skills at intermediate levels of sophistication and size.

Second, the educational system developed along relatively high-cost lines which could not be sustained in the face of the economic deterioration of the 1980s. Cost-increasing factors included relatively large student subsidies, high repetition and dropout rates, sometimes low student-teacher ratios, large nonteaching staffs, small size of many institutions, and general inefficiencies resulting from weak management. High salaries were also a factor in the 1960s but have since been whittled away by inflation. To finance and expand this system in the light of rapid population growth required relatively high levels of effort, measured by shares of GDP and of the government budgets devoted to education. With generous help from donors, this was more or less accomplished during the 1960s and early 1970s. But when government revenues ceased to expand and in some cases declined, cuts in education budgets became inevitable.

The Bank bears some responsibility for this situation insofar as it encouraged expansion of education systems beyond sustainable limits without seriously investigating the recurrent cost implications of its actions during the 1960s and 1970s, and then during part of the 1980s reduced its support for the sector. But much of what happened during the late 1970s and 1980s—in particular the oil price shocks and deteriorating terms of trade—could not have been anticipated. It is sometimes alleged the Bank and the Fund bear responsibility because their adjustment operations promoted budget reductions without simultaneously trying to protect the social sectors; but this study could find no evidence of a correlation between adjustment operations and shares of budgets devoted to education.

Third, the operation of the domestic and international labor markets for higher level skills has contributed to the persistence of shortages of these skills, despite the training that has occurred during the last three decades. On the one side, civil service salary structures, combined with weak demand in the private sector during the last decade, have resulted in a serious deterioration in the real wages offered to Africans with higher level skills. On the other, technical assistance personnel are made available to governments at highly subsidized rates through foreign assistance programs. The result has been that expatriates have sometimes been hired in place of Africans with comparable skills while the latter seek positions in the international market. The net effect has been increased rather than decreased dependence on expatriates.

In searching for solutions to Africa's human resource problems, all parties—governments, donors, and NGOs—have focused nearly all their attention on the second of these three factors. That put too much of a burden on Africa's fragile education systems. Even if the financial problems of the 1980s had not occurred, it is unlikely that these systems could have expanded rapidly enough (while maintaining or improving quality) to have kept up with the growth in demand for higher level skills and losses in supply of these skills to other markets that was caused by the other two factors.

## Education

During the 1981–83 period, Sub-Saharan Africa received about $2.00 per capita in external assistance for education, about twice that received by other regions. Of this amount, the Bank contributed 17 percent, making it the second largest donor after France. Since then, the Bank's share has increased, reaching nearly 22 percent in 1990. Its cumulative commitments through FY92 amounted to $2.8 billion. This is about 7 percent of its total commitments to Africa, compared to 5 percent globally. On a per capita basis, it means that on average each African has received more than twice the level of Bank assistance than individuals in other parts of the world. Over time, however, this preferential treatment has declined. Within Africa, while nearly all countries have had at least one Bank-funded education project, the per capita allocation of Bank funds bears no relationship to per capita income.

Bank-funded projects have made substantial contributions. The funds involved constitute (roughly estimated) 16 percent of SSA government funds provided to the education sector and have contributed, most significantly, to improvements in equity of access by locating additional schools in poor, rural areas, expansion of teacher training capacity, and in recent years the provision of teaching materials and textbooks. But the Bank's impact has been less than it might have been because of several factors that have circumscribed its actions, particularly in Africa.

During the 1960s, the Bank did not have an African education strategy. It had a global strategy—a statement that it would help finance the capital requirements of vocational, technical, and diversified secondary education that it applied to all regions. This strategy was not completely appropriate or adequate in much of Africa where many of the other necessary elements for its successful application—for example, the managerial skills, the teaching materials, properly prepared teachers, properly prepared and motivated students, and availability of appropriate jobs upon graduation—were often missing. It could have worked well if governments had had the capacity to compensate using other funds to create a more balanced investment program or had been able to effectively argue with Bank officials for special treatment, as did many governments in other parts of the world; but those were rare events in Africa. The consequence was less value added from the investments made than might have been the case.

Slowly, during the next two decades, the tension within the Bank between central directives and regional needs was resolved in favor of decentralization. In 1972, responsibility for education projects was transferred to the regions, for the first time allowing a divergence to occur between central policy guidelines and actual project content. During the 1980s, staff working on Africa was increased and a number of important Africa-specific studies were undertaken. The 1987 reorganization pressed decentralization further. This trend found its overt expression in 1988 with the publication of the Bank's first region-specific education policy paper, *Education in Sub-Saharan Africa: Policies for Adjustment, Revitalization, and Expansion*, which, while laying out some region-specific guidelines, called for development of country-specific strategies. It is unfortunate that this did not occur much earlier in this thirty-year period.

The McNamara years (1968 to 1981) introduced two features that had mixed results for the education sector: substantial pressure to increase lending, and the poverty, or basic needs, focus to development. The rapid increase in lending authority, coming at a time when foreign aid from other sources was also expanding, set off a keen competition for investment projects and new initiatives that tended to overwhelm Bank as well as country absorptive capacity. There was little time for orderly investigation or pilot testing of new ideas, little patience for utilizing a participatory approach to project planning, a preference for an enclave approach to implementation (e.g., using free-standing project implementation units staffed by expatriates rather than first building up implementation capacity in line ministries), and a tendency to embrace, and then drop, new initiatives too quickly. There is no doubt that more resources were moved and projects implemented than would have been the case had there been less lending pressure, but it came at a cost of decreased sustainability of results.

The basic needs approach was also a mixed blessing for the education sector. On the one hand, it got the Bank involved in primary and nonformal education, areas it had previously shied away from. Moreover, as noted above, equity of access was fostered by encouraging investments primarily in poor, rural areas. On the other hand, it resulted in reduced priority for secondary and especially for tertiary education. Initially, increased lending for primary was not supposed to be at the expense of secondary and tertiary. Indeed, secondary and tertiary institutions should have been mobilized to play important roles in any attack on poverty. But, given time, staff, and especially budget constraints, which reached crisis proportions in many countries during the 1980s—plus the notion that higher education favored better-off population groups—this initiative came at the expense of secondary and tertiary, with adverse effects on educational development in many countries.

The most serious challenge to the Bank's education efforts in Africa came as a consequence of the economic deterioration of the 1980s. It was a challenge that the education staff of the Bank found hard to meet, first because of Bankwide restrictions on providing financial support for current operations, and second because its lending budget for the social sectors was constrained for several years to make room for structural adjustment lending and to focus on more directly productive sectors. In reaction, it urged its borrowers even more forcefully than before to pursue internal efficiency and cost recovery, particularly at the university level, and for transfer of the savings generated to the primary sector to protect it from further cuts—a political non-starter in most countries, particularly at a time when universities were themselves in desperate financial straits. In recent years, the Bank appears to have backed off of this approach, in favor of advocating reforms at the university level for the sake of improving operations there, a more viable approach that seems to be having some positive effects.

Since 1988, a number of these constraints on Bank actions have abated. Lending has increased. The restrictions against recurrent cost funding have been relaxed a bit. A number of Africa-specific studies have emerged which provide a better basis on which to design projects and establish proper preconditions for lending. The notion that sector development requires a better balance between subsectors seems more widely accepted. And in a few cases—dependent more on individual predilections than on deliberate policy initiatives—a more participatory approach has been used, and with good effect, in project design. While these signs of change are promising, they remain rare. It is too soon to know how effective they will be and whether they will have a demonstration effect for the rest of the region.

Thus, starting very tentatively and narrowly, the Bank's efforts in the education sector have evolved in a variety of dimensions: from the application of a global policy to the elaboration of region-specific, and increasingly, country-specific, policies; from providing one critical input—mainly civil works—to providing more and more of the whole package of inputs required to make a project work; from a focus on expansion of the system to an increasing focus on improvements; and from little involvement in policy issues (other than what was necessary for a given project) to considerable involvement, including not only sectorwide but nonsector issues when important for sector operations.

The positive side of this evolution is the heightened efforts to ensure that the whole package of inputs and policy changes necessary for project success is present when needed. The negative side is a deteriorating sense of ownership by the recipient institutions and an increasing dependence on external support for whatever progress is made. It is not a formula for achieving lasting improvements in local capacity.

The study suggests three ways to cope with these negative consequences. One is to back off a bit, waiting longer to lend until more of the conditions necessary for a successful operation are in place, but at the same time encouraging and facilitating recipient processes to establish these conditions. The second is to scale projects down to the size and complexity that can be designed and implemented with existing domestic capacity. While this approach has been recommended many times, the study found no evidence of its being implemented. The third is to devote less time to the elaboration of substantive interventions and more to the development of mechanisms to accomplish the same thing more indirectly and, hopefully, more effectively. One mechanism that has been used successfully is the establishment of a fund to which individual institutions can apply on a competitive basis to finance activities that meet certain criteria. To mobilize the best efforts possible, any institution should be allowed to apply, private as well as public. Examples of the application of this principle in Africa and elsewhere are provided in the text.

## Technical Assistance

During the last two decades, Africa has received a disproportionately large share of the Bank's technical assistance (TA) funds. Yet most studies of TA activities (herein defined to include project-related training) suggest that results are disappointing. While "gap-filling" TA, with some important qualifications, has worked reasonably well, TA for training and for institution building has used up large amounts of foreign assistance with few improvements in domestic capacity to show for it. Indeed, it may be that in subtle ways TA is doing more to increase dependence on its continuance than it is to increase local capacity.

Proposals to remedy this situation fall into five categories: (1) improve the processes and procedures by which TA is delivered and managed; (2) use different approaches to transfer knowledge and build capacity; (3) improve the working environment within which TA operates; (4) remove "price distortions" in the markets for higher-level skills; and (5) reduce the need for TA, for example, by reducing or consolidating government operations, simplifying projects, and using less skill-intensive technologies.

Bank analyses, recommendations, and efforts at improvement have focused mainly on the first two of these categories. Most of the recommendations in the first category involve treating TA more seriously—devoting more effort to the design of training programs, specifying objectives in terms of improvements in sustainable local capacity, involving the borrower in project design, intensifying supervision, and carefully monitoring and evaluating results. Recommendations in the second category include making greater use of short-term advisors, local consultants and researchers, and twinning arrangements. There is evidence that some of these recommendations are being implemented. But the gap between practice and recommendations remains wide.

The third category is concerned with correcting problems in the working environment that make it difficult for TA activities to be productive, for example, personnel and administrative procedures that weaken civil servants' incentive in doing their job better and lack of complementary inputs. The Bank's short-run response to these problems has been to shore up agencies responsible for project implementation, or to establish new semi-independent agencies for this purpose, by providing them with expatriate staff, salary supplements, and funds for equipment and supplies. This approach has helped considerably to improve implementation of individual projects, but it typically does little to develop sustainable institutional capacity and has contributed to distortions in labor markets for higher level skills. The Bank's longer-run response, particularly in recent years, has been to promote civil service and administrative

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reform programs. The former generally aim to decrease employment and use the savings to improve wage structures and nonsalary operating budgets, while the latter include a variety of efforts to improve personnel management, budgeting and information systems, and legal frameworks. Evaluations of these efforts have not reported great success to date.

The fourth category is concerned with correcting distortions in the markets for higher level skills that encourage expatriates to be hired in place of Africans who in turn seek employment outside their national markets. This problem has been largely neglected by the Bank, both in analysis and in practice. The study makes a number of suggestions which might help—for example, revising guidelines for contracting TA, which currently tend to neglect cost considerations, insisting on better record-keeping that makes the full cost of using foreign and local consultants transparent, providing TA personnel with incentives to rapidly achieve capacity building objectives, and requiring recipient agencies to pay (to the central government or into a fund) for consulting services, even if those services are provided free to the government. This last suggestion would probably be the most effective but the hardest to achieve (since governments, plus all major donors, would have to agree to it). But so long as market incentives remain as they are, the inflow of expatriates and outflow of trained Africans is likely to continue; and Bank efforts to improve procedures and delivery modes are likely to have only marginal impact.

The final category is concerned with influencing the factors that determine the demand for TA: growth in the magnitude and complexity of government functions, growth in foreign assistance, and the character of the development process itself. The study indicates that there are reasonable possibilities for influencing each of these determinants. Here again, however, the Bank has not yet fully explored such possibilities.

## Recommendations

During the 1960s and early 1970s, significant improvements were made in Africa's capacity to manage its own affairs, the most obvious manifestation being the replacement of expatriates by nationals in operating positions throughout the economy. During the remainder of the thirty-year period being reviewed, this process has decelerated and may even have reversed directions in a few countries. Government, Bank, and other donor efforts at human resource development (HRD) in Africa have not been adequate to stem the deterioration that has occurred during the second half of this period. So far as the Bank is concerned, the study suggests three reasons for this: the Bank limited its interventions to education, training, and TA, in the process ignoring the many other factors that influence HRD; until recently, these fields were assigned a secondary role in the Bank's development strategy for the region; and some activities within these fields were less effective than they might have been, and in some respects—in part because of the Bank's style of operations—may have been counterproductive. For most of this thirty-year period, the Bank has not behaved as if it believed statements like Eugene Black's (see page 27) that human resource development is a precondition to wise and effective utilization of foreign investments.

If the Bank were to act on President Black's statement, what might it do differently? First, and foremost, it would make capacity building (both human and institutional development) the central objective of its activities and would search for monitorable indicators of progress by which to judge whether this objective was being achieved.

Second, it would step back periodically and consider all of a country's priority human resource needs, all the ways those needs might be met, and sector by sector, what might be done to improve the situation both on the demand and the supply sides of the situation.

Third, new types of programs, projects and funding arrangements are likely to emerge. For example:

- It is likely to encourage the search for more sustained means of financing these strategies than currently exists through use of individual, stand-alone projects of limited duration. The funding arrangement developed for the African Capacity Building Fund is promising example of what might be done.
- It could result in new policy initiatives—for example, concerted attempts to correct price distortions in labor markets for higher level skills, intensified efforts to promote entrepreneurial development by encouraging small-scale enterprise development building upon existing intermediate technologies and skill levels, and greater utilization of the private sector for the delivery of educational, training, and research services.
- Within the education sector, it is likely to encourage three shifts in emphasis:

Increased concern for balanced, integrated development of the sector. This is likely to mean more use of program loans and in some cases more focus on higher education with the specific purpose of developing and retaining skilled nationals required to reduce dependence on foreign experts in operating roles.

Greater efforts to find cost-effective approaches to provide the large—and in most countries, still growing—number of persons unlikely to receive much education through the traditional classroom route with something of social and productive value. This might include greater use of distance education approaches and intersectoral projects that combine income-generating activities with educational programs.

More use of funding mechanisms that reward excellence: competitive funding arrangements for educational and research institutions that would incorporate principles similar to those used in social funds (see Chapter 2), and/or stipends, vouchers, or capitation fees (see Chapter 3) that make school budgets more dependent on parents' perception of performance, and, of course, achievement scholarships for students.

Fourth, some Bank procedures and styles of operation would change in ways that would deliberately and consciously promote ownership and capacity building. For example, Bank staff and consultants would refrain from writing reports and studies that should, for maximum capacity-building effect, be written by domestic personnel.

Finally, the Bank would take project assessment, supervision, monitoring and evaluation of education and TA projects more seriously than it has so far. At a minimum, projects would be derived from an overall strategy for human resource development and justified in terms of that strategy, monitorable indicators of progress would be identified, and both baseline and end-of-project evaluation surveys would become routine. Eventually, some form of benefit-cost analysis, or at least cost-effectiveness analysis, would be applied so that the development impact of these projects can be assessed.

No one would argue that these changes, even if implemented zealously and with the cooperation of other donors, would by themselves result in the kind of progress in human resource development everyone wishes for Africa. There are too many other factors over which no one, let alone an external agency like the Bank, has much control. At a minimum, however, they should facilitate progress by clarifying goals, eliminating mixed signals, and suggesting alternative, hopefully more effective, solutions.

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# Resumen

El presente estudio tiene como tema la contribución del Banco Mundial al perfeccionamiento de los recursos humanos en los países de Africa al sur del Sahara (ASS). Ha sido motivado por la preocupación que despierta la desalentadora lentitud con que se va superando la escasez de mano de obra especializada y calificada, a pesar de los considerables recursos destinados durante los tres últimos decenios a tal fin tanto por los gobiernos como por los donantes. En este estudio se llega a la conclusión de que esa inquietud está justificada. ¿A qué se debe? ¿Qué papel ha desempeñado el Banco? ¿Qué enseñanzas provechosas para el futuro se pueden extraer de la experiencia pasada?

## El problema

Las aptitudes humanas —la capacidad de resolver problemas, el conocimiento de los datos objetivos pertinentes y la habilidad técnica, administrativa y empresarial— se adquieren a través de la educación y de la experiencia (aprender haciendo). Cuando las naciones africanas alcanzaron la independencia tenían grandes carencias en ambos campos. Era alarmante el número de personas que jamás habían asistido a clase. Pocas tenían más conocimientos prácticos que los indispensables para ocuparse de la agricultura de subsistencia y de actividades de intercambio menores. En los últimos 30 años algunos países progresaron considerablemente pero, en general, los avances no han sido tan rápidos como en otros países en desarrollo y han resultado insuficientes para reducir en grado significativo la dependencia africana de los extranjeros en el desempeño de muchas funciones importantes. Además, este progreso se registró, principalmente, durante los decenios de 1960 y 1970; en los años ochenta en realidad hubo, incluso, algunos retrocesos. En algunos países han decrecido las tasas de matriculación en la escuela primaria, al tiempo que la expansión en los niveles secundario y terciario se ha hecho más lenta. Al parecer, ha empeorado la calidad de los servicios de enseñanza en todos los niveles. El reemplazo de extranjeros por africanos, veloz durante los años sesenta y primeros de los setenta, parece haber disminuido su ritmo y, en algunos casos, se ha invertido. Ha sido motivo de especial preocupación el deterioro en los niveles de educación más elevados, en los cuales se prepara a quienes han de cumplir funciones directivas en la ciencia, la tecnología, la administración y la economía.

Según el estudio, son tres las principales causas prácticas de este problema. En primer lugar, la naturaleza del proceso de desarrollo en ASS durante los decenios de 1960 y 1970 no permitió conservar su factor de producción más escaso: el capital humano. Por el contrario, alentó el crecimiento de operaciones en gran escala con alto coeficiente de capital e importaciones y desalentó el desarrollo de operaciones privadas en pequeña escala basadas en tecnologías intermedias. La primera circunstancia incrementó la demanda de administradores y técnicos con elevada especialización y amplia experiencia, que sólo podía satisfacerse desde el exterior, mientras que la segunda impidió la adquisición de experiencia y conocimientos prácticos de complejidad y dimensión intermedios.

En segundo lugar, el sistema de enseñanza siguió una pauta de gastos relativamente altos, insostenibles a raíz del deterioro económico de los años ochenta. Entre los factores que contribuyeron a aumentar los costos se cuentan los subsidios —bastante elevados— a los estudiantes, las altas tasas de repetición y deserción escolar, la relación —a veces baja— profesor-alumnos, el tamaño reducido de muchas instituciones y la ineficiencia general resultante de una administración deficiente. En el decenio de 1960 también los sueldos estaban incluidos entre aquellos factores, pero desde entonces la inflación los ha ido reduciendo gradualmente. Para financiar y ampliar este sistema en conformidad con el veloz crecimiento de la población se requería un esfuerzo considerable, medido en función de la parte del PIB y los presupuestos públicos dedicada a la educación. Con la generosa ayuda de los donantes, ello se pudo lograr, en mayor o menor medida, durante los años sesenta y primeros de los setenta, pero, cuando los ingresos públicos dejaron de aumentar y en algunos casos disminuyeron, los recortes de los presupuestos destinados a la educación resultaron inevitables.

El Banco es, en parte, responsable de esta situación en la medida en que alentó la expansión de los sistemas de educación más allá de los límites sostenibles sin investigar seriamente los gastos ordinarios resultantes de su actuación durante los decenios de 1960 y 1970 y, luego, redujo su apoyo al sector durante parte de los años ochenta. No obstante, habría sido imposible prever gran parte de lo sucedido a fines de los años setenta y durante los ochenta —en particular, la crisis producida por los precios del petróleo y el deterioro de la relación de intercambio. Se aduce a veces que el Banco y el Fondo tienen su cuota de responsabilidad puesto que sus operaciones de ajuste promovieron reducciones presupuestarias sin proteger, al mismo tiempo, los sectores sociales; según este estudio, sin embargo, no han podido hallarse pruebas de que exista una correlación entre las operaciones de ajuste y la parte de los presupuestos destinada a la educación.

En tercer término, el funcionamiento de los mercados de trabajo locales e internacionales de personal altamente especializado ha contribuido a la continua escasez de este personal, a pesar de la capacitación que ha tenido lugar en las tres últimas décadas. Por un lado, las estructuras salariales de la administración pública, aunadas a la escasa demanda del sector privado en el último decenio, han provocado la reducción de los sueldos reales ofrecidos a los africanos con mayor especialización. Por otra parte, se ofrece a los Estados personal de asistencia técnica a tasas fuertemente subvencionadas a través de los programas de asistencia exterior. Por ello, se contrata a veces a extranjeros en lugar de africanos con formación similar, mientras que estos últimos buscan empleo en el mercado internacional. En definitiva, la dependencia respecto al personal extranjero, lejos de disminuir, se ha intensificado.

Al buscar soluciones a los problemas de Africa en materia de recursos humanos, todas las partes —gobiernos, donantes y ONG— han concentrado prácticamente toda su atención en el segundo de estos tres factores, lo cual ha constituido una carga excesiva para los frágiles sistemas de educación africanos. Aun de no haberse producido los problemas financieros de los años ochenta, no es probable que estos sistemas se hubieran podido ampliar con la rapidez necesaria (manteniendo o mejorando, al mismo tiempo, la calidad) para poder responder al aumento de la demanda de personal altamente

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especializado y de las pérdidas de la oferta de este personal en favor de otros mercados, provocado por los otros dos factores.

## Educación

Durante el período que va desde 1981 a 1983, Africa al sur del Sahara recibió aproximadamente US$2 per cápita en concepto de ayuda externa para educación, alrededor del doble de lo que recibieron otras regiones. De esta cantidad, el Banco aportó el 17 por ciento, lo cual lo convirtió en el segundo donante después de Francia. Desde entonces, el porcentaje entregado por el Banco se incrementó hasta alcanzar casi el 22 por ciento en 1990. Sus compromisos acumulados durante el ejercicio correspondiente a 1992 alcanzaron los US$2.800 millones, lo que representa aproximadamente el 7 por ciento del total de sus compromisos para Africa, mientras que a escala mundial el porcentaje es del 5 por ciento. Ello significa que, en cifras per cápita, cada africano ha recibido del Banco casi el doble de asistencia que los habitantes de otras partes del mundo. Con el tiempo, sin embargo, este tratamiento preferencial ha ido disminuyendo. Dentro de Africa, si bien casi todos los países cuentan al menos con un proyecto de educación financiado por el Banco, la asignación por habitante de los fondos del Banco no guarda relación con los ingresos per cápita.

Los proyectos financiados por el Banco han conseguido logros notables. Los fondos asignados representan, según una estimación aproximada, el 16 por ciento de los fondos públicos destinados en ASS al sector de la educación y han constituido un gran avance hacia la igualdad de acceso a la enseñanza mediante la ubicación de escuelas en zonas rurales pobres, la capacitación de docentes y, en años recientes, el suministro de materiales didácticos y libros de texto. Pero las consecuencias de la labor del Banco podrían haber sido aún más importantes de no haber mediado varios factores que limitaron su actividad, especialmente en Africa. Durante los años sesenta, el Banco no tenía estrategia alguna para Africa en materia de educación. Contaba con una estrategia a nivel mundial —la afirmación, que aplicaba en todas las regiones, de que ayudaría a financiar las necesidades de capital de la educación profesional, técnica y secundaria diversificada. Esta estrategia no resultaba completamente apropiada o adecuada para gran parte de Africa, donde a menudo faltaban muchos de los otros elementos necesarios para llevarla a cabo con éxito, como el personal directivo, materiales didácticos, profesores con una correcta formación, alumnos adecuadamente preparados y motivados, y disponibilidad de empleos apropiados para los graduados. Podría haber tenido resultados satisfactorios si los gobiernos hubieran podido compensar la situación utilizando otros fondos para crear un programa de inversiones más equilibrado o hubieran conseguido negociar con los funcionarios del Banco un tratamiento especial, como hicieron las autoridades en muchas otras partes del mundo; pero rara vez ocurría algo así en Africa. Como consecuencia, las inversiones generaron menor valor agregado del que podrían haber producido.

Lentamente, en los dos decenios siguientes, la tensión dentro del Banco entre las directivas centrales y las necesidades regionales se fue resolviendo en favor de la descentralización. En 1972 se transfirió a las regiones la responsabilidad de los proyectos vinculados a la educación y por primera vez se permitió que se produjera una divergencia entre las normas de política centralizadas y el contenido real de los proyectos. Durante el decenio de 1980 aumentó la cantidad de personal que se ocupaba de Africa y se emprendieron varios estudios importantes acerca de este continente. La reorganización de 1987 llevó la descentralización aún más lejos. Esta tendencia se hizo patente en 1988 con la publicación del primer documento de política del Banco que versaba sobre la educación en un

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región específica, *Education in Sub-Saharan Africa: Policies for Adjustment, Revitalization, and Expansion*, en el cual, al tiempo que se establecían algunas pautas para determinadas regiones, se reclamaba la formulación de estrategias por países. Es una lástima que esto no ocurriera mucho antes.

La era de McNamara (1968 a 1981) introdujo dos características que tuvieron resultados dispares para el sector de la educación: una considerable presión para aumentar los préstamos y un enfoque del desarrollo basado en el alivio de la pobreza o en las necesidades básicas. El veloz incremento de la capacidad de conceder préstamos, en momentos en que también se ampliaba la ayuda extranjera proveniente de otras fuentes, desató una intensa competencia por ofrecer proyectos de inversión y nuevas iniciativas que solían superar la capacidad de absorción del Banco y de los países. Hubo poco tiempo para someter las nuevas ideas a investigaciones ordenadas o a pruebas experimentales, escasa paciencia para utilizar un método participatorio en la planificación de proyectos, cierta preferencia por recurrir al criterio del "enclave" para la ejecución (por ejemplo, empleando unidades independientes de ejecución de proyectos integradas por extranjeros, en vez de fomentar la capacidad de ejecución en los ministerios sectoriales) y la tendencia a emprender, y luego abandonar, nuevas iniciativas demasiado rápidamente. No cabe duda de que, debido a la presión para incrementar los préstamos, se movilizaron más recursos y se llevaron a la práctica más proyectos, pero todo ello se realizó a costa de una menor sostenibilidad de los resultados.

El criterio de las necesidades básicas también constituyó una ventaja a medias para el sector de la educación. Por un lado, llevó al Banco a interesarse en la instrucción primaria y la instrucción no formal, en las que siempre se había mostrado reacio a intervenir. Además, como se mencionó anteriormente, al dar impulso a las inversiones, en particular en zonas rurales pobres, se fomentó el acceso equitativo a la educación. Por el otro, sin embargo, en virtud de aquel criterio se atribuyó menos importancia a la educación secundaria y menos aún a la terciaria. Al comienzo, el aumento del financiamiento destinado a la instrucción primaria no suponía la reducción del que se otorgaba a la enseñanza secundaria y terciaria. En realidad, se debería haber movilizado a las instituciones secundarias y terciarias para que desempeñaran papeles importantes en la lucha contra la pobreza. Pero, dadas las limitaciones de tiempo, de personal y, especialmente, de presupuesto —que alcanzaron proporciones de crisis en muchos países durante los años ochenta— y la idea de que la educación superior favorecía a los grupos más acomodados de la población, esta iniciativa se puso en marcha a expensas de la educación secundaria y terciaria, lo cual perjudicó el progreso de la educación en muchos países.

El problema más grave que afrontó el Banco en su actividad en materia de educación en Africa fue consecuencia del deterioro económico que tuvo lugar en el decenio de 1980. Para el personal del Banco especializado en educación se trató de un obstáculo difícil de superar, en primer lugar por las restricciones impuestas por el Banco al apoyo financiero a las operaciones en curso y, en segundo término, porque durante varios años se restringió el presupuesto de la institución destinado a los préstamos para los sectores sociales en beneficio de los préstamos para fines de ajuste estructural y de la atención a los sectores directamente productivos. Como reacción, el Banco instó a los prestatarios aún más enérgicamente que antes, a alcanzar la eficiencia interna y recuperar costos, especialmente en el nivel universitario, y a transferir al sector primario los ahorros generados, para protegerlo de ulteriores reducciones —medida política impensable en la mayoría de los países, particularmente en momentos en que las mismas universidades atravesaban una angustiosa situación financiera. Aparentemente, en los últimos años el Banco ha modificado su posición y ahora aboga por reformas en el nivel universitario a fin de mejorar las operaciones en éste, criterio más viable que parece estar produciendo algunos efectos positivos.

Desde 1988 se han suprimido varias de estas restricciones que coartaban la actividad del Banco. Han aumentado los préstamos. También se han atenuado las limitaciones al financiamiento de gastos ordinarios. Se han realizado diversos estudios acerca de Africa, que constituyen una base más adecuada para el diseño de proyectos y la determinación de las condiciones preliminares adecuadas para los préstamos. Parece encontrar mayor aceptación la idea de que el desarrollo sectorial requiere un mejor equilibrio entre los subsectores. Y en algunos casos —que dependen más de las predilecciones individuales que de iniciativas deliberadas en materia de políticas— para el diseño de proyectos se ha empleado, con buenos resultados, un criterio más abierto a la participación. Si bien estos indicios de cambio son alentadores, siguen siendo poco frecuentes. Es demasiado pronto para saber cuán eficaces serán y si tendrán un efecto de demostración para el resto de la región.

Así, tras haber comenzado de manera muy experimental y restringida, los esfuerzos del Banco en el campo de la educación han ido evolucionando en varias dimensiones: de la aplicación de una política a nivel mundial se pasó a la formulación de políticas específicas para determinadas regiones y, cada vez con mayor frecuencia, para determinados países; en lugar de proporcionar un solo insumo crítico —principalmente obras civiles— se llegó a suministrar un número cada vez mayor de los insumos necesarios para que un proyecto marchara satisfactoriamente; la atención se desplazó de la expansión del sistema a las mejoras, y de la escasa participación en cuestiones normativas (salvo lo indispensable para un proyecto dado) se pasó a una intervención considerable, no sólo en el sector sino también en otros temas no pertenecientes a él, pero importantes para las operaciones del mismo.

El aspecto positivo de esta evolución radica en que se han intensificado los esfuerzos para asegurar que, cuando sea preciso, se cuente con el conjunto de insumos y modificaciones de políticas necesarios para que el proyecto tenga éxito. Los aspectos negativos son el menoscabo del sentido de identificación de las instituciones beneficiarias y la dependencia creciente de la ayuda del exterior para lograr cualquier progreso. No se trata de una fórmula que permita mejorar en forma duradera la capacidad local.

En el estudio se proponen tres caminos para abordar estas consecuencias negativas. El primero de ellos consiste en mantenerse un poco al margen y, antes de otorgar el financiamiento correspondiente, esperar hasta que se den las condiciones necesarias para que las operaciones tengan éxito, alentando al mismo tiempo a los beneficiarios a lograr estas condiciones y allanándoles el camino para ello. El segundo reside en reducir la dimensión y complejidad de los proyectos, de manera que puedan ser diseñados y ejecutados con la capacidad local existente. Si bien este método ha sido recomendado muchas veces, el estudio no halló prueba alguna de que se estuviera poniendo en práctica. El tercer procedimiento es dedicar menos tiempo a la elaboración de intervenciones de fondo y más al desarrollo de mecanismos para lograr lo mismo de manera más indirecta y, es de esperar, más eficaz. Se ha utilizado con éxito un mecanismo que consiste en establecer un fondo al cual las instituciones se pueden dirigir para solicitar el financiamiento de actividades que cumplan con determinados requisitos. Con el objeto de movilizar los mejores esfuerzos posibles, se debe permitir que participen todas las instituciones, sean privadas o públicas. En el texto se presentan ejemplos de la aplicación de este principio en Africa y en otras partes del mundo.

## Asistencia técnica

Durante los últimos 20 años, Africa ha recibido un porcentaje desproporcionadamente alto de los fondos del Banco destinados a actividades de asistencia técnica. Sin embargo, según la mayor parte de los estudios acerca de estas actividades (que, en el presente contexto, incluirían también la capacitación para un determinado proyecto) los resultados son desalentadores. Si bien la asistencia técnica encaminada a "llenar los vacíos" ha logrado, con algunas salvedades importantes, resultados razonablemente buenos, la asistencia técnica para capacitación y fortalecimiento institucional ha recibido grandes volúmenes de ayuda extranjera sin que ello le haya permitido mejorar mucho la capacidad local. En realidad, es posible que la asistencia técnica esté contribuyendo, de manera muy sutil, a que las comunidades dependan más de ella en vez de fortalecer la capacidad local.

Las propuestas para remediar esta situación se pueden clasificar en estas cinco categorías: (1) mejorar los procesos y procedimientos mediante los cuales se presta y se administra la asistencia técnica; (2) utilizar diferentes métodos para transferir conocimientos y desarrollar aptitudes; (3) mejorar el medio laboral en el que se presta la asistencia técnica; (4) eliminar las "distorsiones de los precios" en los mercados de personal altamente especializado, y (5) limitar la necesidad de asistencia técnica, por ejemplo reduciendo o agrupando las operaciones oficiales, simplificando los proyectos y empleando recursos técnicos que necesiten menos capacitación especializada.

Los análisis, las recomendaciones y los intentos del Banco para introducir mejoras se han concentrado, fundamentalmente, en las dos primeras categorías. La mayoría de las recomendaciones que se ajustan a la primera categoría se refieren a la necesidad de abordar la asistencia técnica de manera más seria —dedicando más esfuerzo al diseño de los programas de capacitación, precisando los objetivos en función de las mejoras de la sostenibilidad de la capacidad local, logrando que el prestatario participe en el diseño del proyecto, intensificando la supervisión y siguiendo y evaluando cuidadosamente los resultados. En la segunda categoría se recomienda recurrir más a asesores contratados por plazos cortos y a consultores e investigadores locales, y acuerdos de hermanamiento. Existen pruebas de que se están poniendo en marcha algunas de estas recomendaciones, pero el desfase entre éstas y la práctica sigue siendo considerable.

En la tercera clase se reúnen las propuestas para solucionar los problemas del medio laboral que impiden que las actividades de asistencia técnica sean productivas como, por ejemplo, los procedimientos relativos al personal y la administración que debilitan los incentivos para que los funcionarios públicos realicen mejor su trabajo, y la ausencia de insumos complementarios. La respuesta inmediata del Banco a estos problemas ha sido apoyar a los organismos encargados de la ejecución de los proyectos o establecer con este propósito nuevos organismos semiindependientes, proporcionándoles personal extranjero, complementando los sueldos y entregando fondos para equipos y suministros. Este enfoque ha ayudado notablemente a mejorar la ejecución de cada proyecto, no así a desarrollar una capacidad institucional sostenible; además, ha contribuido a provocar distorsiones en el mercado de trabajo de personal altamente especializado. Como respuesta a largo plazo, especialmente en los últimos años, el Banco ha promovido programas de reformas para los funcionarios públicos y la administración. Los primeros generalmente tienen por objeto disminuir el empleo y utilizar lo ahorrado para mejorar las estructuras salariales y los presupuestos de explotación no salariales, mientras que los últimos incluyen varios intentos para mejorar la gestión de personal, los sistemas de información y preparación de presupuestos y los marcos jurídicos. Según se

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desprende de las evaluaciones de estas iniciativas, no se han registrado grandes avances hasta la fecha.

La cuarta categoría se ocupa de corregir las distorsiones de los mercados de personal altamente especializado, que fomentan la contratación de extranjeros en lugar de africanos, quienes a su vez buscan empleo fuera de sus mercados nacionales. El Banco ha descuidado en gran medida este problema, tanto en el plano analítico como en el práctico. En el estudio se dan una serie de indicaciones que podrían ser de utilidad, como modificar las normas para la contratación de asistencia técnica, que en la actualidad suelen pasar por alto las cuestiones relativas a los costos, insistir en que se lleven mejores registros para que queden reflejados con claridad los gastos que acarrea la contratación de consultores extranjeros y locales, crear incentivos para que el personal de asistencia técnica logre alcanzar rápidamente los objetivos vinculados al desarrollo de las aptitudes y exigir a los organismos beneficiarios que paguen (al gobierno central o a un fondo) los servicios de consultoría, aun cuando esos servicios se proporcionen al Estado en forma gratuita. Esta última sugerencia es quizás la más eficaz, pero la más difícil de poner en práctica, pues deberían aceptarla los gobiernos y los principales donantes. Pero mientras los incentivos del mercado sigan como hasta ahora, es factible que continúe el ingreso de extranjeros y la salida de africanos capacitados, y probablemente los esfuerzos del Banco para mejorar los procedimientos y las modalidades de prestación tendrán sólo efectos marginales.

La última categoría comprende las propuestas encaminadas a influir en los factores que determinan la demanda de asistencia técnica: el aumento de la magnitud y la complejidad de la función pública, el crecimiento de la ayuda exterior y la naturaleza del proceso mismo de desarrollo. En el estudio se señala que hay posibilidades razonables de ejercer influencia en cada uno de estos factores determinantes. Sin embargo, tampoco en este caso el Banco ha explorado a fondo estas posibilidades.

## Recomendaciones

Durante los años sesenta y primeros de los setenta la capacidad de África para manejar sus propios asuntos mejoró notablemente, como se puso de manifiesto con la sustitución de extranjeros por ciudadanos africanos en puestos operativos en toda la economía. Este proceso se desaceleró en lo que resta del período de 30 años que se examina e, incluso, se invirtió en algunos países. Los esfuerzos desplegados por los gobiernos, el Banco y otros donantes en la esfera del perfeccionamiento de los recursos humanos no han sido suficientes para detener el deterioro que ha tenido lugar en la segunda mitad de este período. En lo que respecta al Banco, en el estudio se señalan tres razones para explicar esta situación: el Banco limitó sus intervenciones a la educación, la capacitación y la asistencia técnica e ignoró los muchos otros factores que influyen en el perfeccionamiento de los recursos humanos; hasta hace poco tiempo, a estos temas se les asignaba un papel secundario en la estrategia del Banco para el desarrollo de la región; algunas actividades en estos campos resultaron menos eficaces de lo que podrían haber sido y en algunos aspectos —en parte por el estilo de las operaciones del Banco— pueden haber sido contraproducentes. Durante la mayor parte de este período de 30 años, el Banco no se condujo como si compartiera afirmaciones como la de Eugene Black (véase la página 27) de que el perfeccionamiento de los recursos humanos es un requisito previo para el uso atinado y eficaz de las inversiones extranjeras.

Si el Banco actuara en consonancia con la declaración del Presidente Black, ¿en qué podría cambiar? Ante todo, haría del fortalecimiento de las capacidades (tanto el desarrollo humano como el institucional) el objetivo fundamental de sus actividades y buscaría indicadores de progreso verificables para determinar si se estaba alcanzando ese objetivo.

En segundo lugar, cada tanto se detendría a considerar las necesidades más urgentes de un país en materia de recursos humanos, todas las formas en que se pueden satisfacer esas necesidades y lo que se puede hacer, sector por sector, para mejorar la situación, tanto desde el punto de vista de la demanda como de la oferta.

En tercer término, podrían aparecer nuevos tipos de programas, proyectos y acuerdos de financiamiento. Por ejemplo:

- Para financiar estas estrategias, el Banco podría alentar la búsqueda de medios más viables que los que existen actualmente, a través del uso de proyectos individuales, de duración limitada. El acuerdo de financiamiento del Fondo para el fortalecimiento de las capacidades en Africa constituye un ejemplo prometedor de lo que se puede hacer.

- Podrían tener lugar nuevas iniciativas en materia de políticas —por ejemplo, intentos concertados para corregir las distorsiones de precios en los mercados de trabajo de personal altamente especializado, mayores esfuerzos por promover el desarrollo empresarial a través de la creación de pequeñas empresas recurriendo al personal con capacitación y a los medios técnicos intermedios, y uso más intenso del sector privado para la prestación de servicios de educación, investigación y capacitación.

- Dentro del sector de la educación, se podrían fomentar los tres cambios siguientes:

Mayor preocupación por lograr un desarrollo equilibrado e integrado del sector. Ello traería probablemente aparejado el uso más frecuente de préstamos para programas y, en algunos casos, un mayor hincapié en la educación superior con el propósito específico de perfeccionar y retener a los nacionales capacitados, necesarios para reducir la dependencia de los países de la región de peritos extranjeros en los puestos operativos.

Mayores esfuerzos para hallar métodos eficaces en función de los costos que permitan brindar algo de valor social y productivo a la gran cantidad de personas —en aumento en la mayoría de los países— que probablemente no reciban mucha instrucción a través de los canales escolares tradicionales. Se podría intensificar el uso de los métodos de educación a distancia y de proyectos intersectoriales que combinen las actividades generadoras de ingresos con los programas de enseñanza.

Mayor uso de los mecanismos de financiamiento que premian la excelencia: acuerdos de préstamo competitivos para las instituciones dedicadas a la educación y la investigación que incorporen principios similares a los utilizados por los fondos sociales (véase el Capítulo 2), y/o estipendios, comprobantes o derechos de capitación (véase el Capítulo 3) que condicionen más los presupuestos de las escuelas a la opinión de los padres sobre su rendimiento y, por supuesto, becas para los estudiantes según su desempeño.

En cuarto lugar, algunos procedimientos y estilos de funcionamiento del Banco podrían cambiar a fin de promover, de manera consciente y deliberada, la identificación con los proyectos y el desarrollo de las capacidades. Por ejemplo, el personal y los consultores del Banco se abstendrían de redactar informes y estudios que podrían ser preparados por el personal local, con el objeto de fomentar al máximo las aptitudes.

Por último, el Banco tendría que abordar con mayor seriedad que hasta ahora la supervisión, el seguimiento y la evaluación —tanto inicial como ex post— de los proyectos relativos a la educación y la asistencia técnica. Como mínimo, los proyectos deberían responder a una estrategia global para el perfeccionamiento de los recursos humanos y estar justificados en función de esa estrategia, se establecerían indicadores de progreso verificables, y los estudios de evaluación iniciales y a posteriori de los proyectos se convertirían en un procedimiento de rutina. Con el tiempo debería aplicarse alguna forma de análisis de costos-beneficios o, al menos, un análisis de la eficacia en función de los costos, a fin de poder evaluar las consecuencias para el desarrollo que estos proyectos acarrean.

Nadie afirma que estos cambios por sí solos, aun cuando se llevaran a cabo con entusiasmo y contaran con la cooperación de otros donantes, producirían la clase de avance en el perfeccionamiento de los recursos humanos que todos desean para Africa. Hay demasiados factores sobre los cuales nadie, y mucho menos un organismo del exterior como el Banco, tiene bastante control. Sin embargo, esos cambios deberían, por lo menos, facilitar el progreso al dejar en claro los objetivos, eliminar las señales ambiguas y proponer otras soluciones que, esperemos, resulten más eficaces.

# Résumé analytique

L'étude examine le rôle joué par la Banque mondiale pour promouvoir la valorisation des ressources humaines dans les pays d'Afrique subsaharienne. Elle cherche à apprécier le bien-fondé des préoccupations causées par la lenteur décevante des progrès vers l'élimination des pénuries de main-d'oeuvre qualifiée et formée, malgré le montant élevé des ressources consacrées à cet effort par les gouvernements et les donateurs au cours des trente dernières années. Elle conclut que ces préoccupations sont justifiées. Pourquoi en est-on arrivé là? Quel rôle la Banque a-t-elle joué? Quels enseignements l'expérience passée peut-elle nous fournir pour l'avenir?

## Le problème

Les capacités humaines — la faculté de régler les problèmes, la maîtrise des connaissances de fait et les compétences techniques et de gestion, ainsi que la capacité d'entreprendre — s'acquièrent par l'éducation et l'expérience (apprendre en faisant). Dans ces deux domaines, les pays africains souffraient de graves déficits au moment de l'indépendance. Un nombre immense de personnes n'avaient jamais fréquenté l'école. Peu d'individus possédaient des compétences allant au-delà de ce qu'exigent l'agriculture de subsistance et le petit commerce courant. Certains pays ont fait des progrès rapides dans les trente dernières années. Au total, cependant, l'évolution a été plus lente que dans les autres régions en développement et, en tout cas, insuffisante pour réduire la dépendance de l'Afrique envers le personnel expatrié pour l'exercice de nombreuses fonctions essentielles. En outre, les progrès qui ont eu lieu ont été surtout accomplis durant les années 60 et 70; au cours des années 80, au contraire, l'évolution s'est parfois inversée. Les taux d'inscription dans l'enseignement primaire ont diminué dans certains pays, tandis que l'augmentation aux niveaux secondaire et tertiaire se ralentissait. On estime généralement que la qualité des services d'éducation à tous les niveaux s'est dégradée. Le remplacement des expatriés par les Africains, rapide dans les années 60 et au début des années 70, semble s'être ralenti et même avoir fait place au phénomène inverse dans quelques cas. Il est particulièrement inquiétant de constater la détérioration de l'enseignement aux niveaux supérieurs où sont formées les futures élites dans les domaines de la science, de la technologie, de la gestion et des affaires.

Selon l'étude, ces problèmes sont imputables à trois grandes causes envisageables sous l'angle opérationnel. Premièrement, la nature même du processus de développement en Afrique subsaharienne durant les années 60 et 70 n'a pas permis de gérer prudemment le facteur de production qui était le plus rare, c'est-à-dire le capital humain. Tout au contraire, le modèle suivi a encouragé la croissance de grandes entreprises capitalistiques et à forte intensité d'importations, et découragé la création de petites entreprises privées qui auraient fait appel aux technologies intermédiaires. Il a donc, d'une part, renforcé la demande de managers et de techniciens hautement qualifiés et expérimentés, qui ne pouvait être satisfaite que par l'étranger, et d'autre part, empêché l'acquisition d'une expérience et de compétences à des niveaux intermédiaires de complexité et de taille.

Deuxièmement, le système d'éducation a évolué selon un modèle relativement dispendieux qu'il n'a plus été possible de suivre dans la situation économique défavorable des années 80. Les causes des coûts élevés ont été notamment : les subventions relativement importantes versées aux élèves, les taux élevés de redoublement et d'abandon, les coefficients élèves-enseignant parfois bas, l'emploi de forts effectifs de non-enseignants, la petite taille de nombreux établissements et les inefficacités générales dues aux insuffisances de la gestion. Les traitements élevés ont aussi joué un rôle dans les années 60, mais l'inflation les a peu à peu grignotés depuis lors. Le financement et l'expansion d'un tel système au rythme rapide de la croissance démographique ont imposé un effort assez considérable si l'on en juge par les parts du PNB et les pourcentages des budgets publics consacrés à l'éducation. Avec l'aide généreuse des donateurs, les pays ont plus ou moins fait face durant les années 60 et au début des années 70. Cependant, quand les recettes publiques cessèrent d'augmenter, et diminuèrent parfois même, des coupes dans les budgets de l'éducation devinrent inéluctables.

La Banque supporte une part de responsabilité dans cette situation. En effet, après avoir encouragé d'abord l'expansion des systèmes d'éducation au-delà des limites durablement soutenables, sans s'inquiéter sérieusement dans les années 60 et 70 des conséquences de son action pour les coûts renouvelables, elle a ensuite réduit son aide au secteur durant une partie des années 80. Certes, il était largement impossible de prévoir les événements qui survinrent à la fin des années 70 et dans les années 80, en particulier les chocs pétroliers et la détérioration des termes de l'échange. Pour certains, la Banque et le Fonds sont responsables de cette évolution, parce que leurs opérations d'ajustement ont tendu à provoquer des compressions budgétaires sans chercher simultanément à protéger les secteurs sociaux; pourtant, l'étude n'a découvert aucune preuve d'une corrélation entre les opérations d'ajustement et les parts de budget consacrées à l'éducation.

Troisièmement, le fonctionnement des marchés du travail nationaux et internationaux pour les niveaux de compétence supérieurs a contribué à entretenir les pénuries dans ce compartiment, malgré l'action de formation accomplie ces trente dernières années. D'une part, l'effet combiné des structures de rémunération de la fonction publique et de la faible demande du secteur privé au cours des dix dernières années a provoqué une grave détérioration des rémunérations réelles offertes aux Africains hautement qualifiés. D'autre part, le personnel d'assistance technique est mis à la disposition des gouvernements à un coût fortement subventionné par l'intermédiaire des programmes d'assistance étrangère. De ce fait, il est arrivé que des expatriés soient engagés à la place d'Africains ayant des qualifications comparables et que ces derniers doivent chercher à s'employer sur le marché international. En définitive, loin d'avoir diminué, la dépendance envers le personnel expatrié s'est renforcée.

Dans leurs tentatives de remédier aux problèmes des ressources humaines de l'Afrique, toutes les parties — gouvernements, donateurs et ONG — ont quasi totalement polarisé leur attention sur le second des trois facteurs qui viennent d'être mis en évidence. Les systèmes d'éducation africains, déjà fragiles, ont été ainsi poussés au point de rupture. Même si les problèmes financiers des années 80 ne s'étaient pas produits, ces systèmes n'auraient probablement pas pu grandir assez vite (tout en maintenant ou en améliorant la qualité) pour soutenir le rythme de croissance de la demande de compétences de niveau supérieur et pour compenser les déperditions de compétences de ce type en direction des autres marchés, causées par les deux autres facteurs.

## Education

Durant la période 1981–83, l'Afrique subsaharienne a reçu près de 2,00 dollars par habitant d'aide extérieure pour l'éducation, soit environ le double des autres régions. La Banque elle-même en a procuré 17 pour cent, se plaçant au second rang des donateurs, derrière la France. Depuis lors, la part de la Banque a augmenté, atteignant près de 22 pour cent en 1990. Ses engagements cumulés pour la totalité de l'exercice 92 se sont élevés à 2,8 milliards de dollars, soit près de 7 pour cent du total de ses engagements en Afrique, au lieu de 5 pour cent à l'échelle mondiale. En mesurant par habitant, on constate qu'en moyenne, chaque Africain a reçu de la Banque une aide équivalant à plus du double de celle reçue par les individus dans les autres régions du monde. Au fil du temps, cependant, ce traitement préférentiel s'atténue. Dans la région Afrique, si presque tous les pays ont eu au moins un projet pour l'éducation financé par la Banque, la répartition des fonds de la Banque par habitant est cependant sans rapport avec le revenu par habitant.

Les projets financés par la Banque ont eu des effets considérables. L'apport de fonds représente (selon une estimation approximative) 16 pour cent des fonds publics consacrés au secteur de l'éducation en Afrique subsaharienne et a favorisé principalement le renforcement de l'équité d'accès en aidant à implanter des écoles supplémentaires dans les régions rurales pauvres, l'augmentation des moyens de formation des enseignants et, ces dernières années, la fourniture de matériels pédagogiques et de manuels scolaires. Toutefois, l'impact de la Banque aurait pu être plus grand encore si plusieurs facteurs n'avaient entravé ses interventions, particulièrement en Afrique.

Pendant les années 60, la Banque n'avait pas de stratégie pour l'éducation en Afrique. Elle avait une stratégie globale, qu'elle appliquait à toutes les régions et qui était d'aider à financer les besoins d'investissements de l'enseignement professionnel, de l'enseignement technique et du secondaire diversifié. Cette stratégie n'était pas réellement appropriée dans une grande partie de l'Afrique où manquaient souvent la plupart des autres éléments nécessaires à sa réussite, que ce soient les compétences de gestion, les moyens pédagogiques, la formation correcte des enseignants, la bonne formation et la motivation des étudiants, ou la possibilité de trouver des emplois satisfaisants en fin d'études. Elle aurait cependant pu réussir si les gouvernements avaient pu compenser ses manques en utilisant d'autres fonds pour créer un programme d'investissement mieux équilibré, ou s'ils avaient été capables de discuter efficacement avec les services de la Banque pour obtenir un traitement spécial, comme beaucoup le firent dans d'autres régions du monde; en pratique, les cas de ce type ont été rares en Afrique. En conséquence, les investissements réalisés n'ont pas produit une valeur ajoutée aussi grande qu'on pouvait l'envisager.

Peu à peu, au cours des vingt années suivantes, la contradiction qui existait à la Banque entre les directives centrales et les besoins régionaux s'est résolue dans le sens de la décentralisation. En 1972, la responsabilité des projets pour l'éducation fut confiée aux régions, ce qui allait permettre, pour la première fois, qu'une divergence apparaisse entre les directives de politique générale émanant du centre et le contenu effectif des projets. Durant les années 80, les effectifs de personnel travaillant sur l'Afrique augmentèrent et plusieurs études importantes concernant l'Afrique furent entreprises. La réorganisation de 1987 accentua davantage la décentralisation. Cette évolution se manifesta au grand jour en 1988, lors de la publication, pour la première fois à la Banque, d'un document de politique de l'éducation pour une région particulière, intitulé *Education in Sub-Saharan Africa: Policies for Adjustment, Revitalization, and Expansion*, qui, tout en énonçant un certain nombre de directives propres à la région, prévoyait la mise au point de stratégies par pays. Il est regrettable qu'il ait fallu attendre aussi longtemps pour en arriver là.

L'époque McNamara (1968 à 1981) a été marquée par deux grands courants qui ont eu des conséquences ambiguës pour le secteur de l'éducation : une forte pression en faveur de l'augmentation des prêts et le recentrage du développement sur la lutte contre la pauvreté (la satisfaction des besoins de base). L'élargissement rapide du pouvoir de prêter, intervenant à un moment où l'aide extérieure d'autres sources augmentait elle aussi, déclencha une vive concurrence dans les projets d'investissement et les initiatives nouvelles qui finit par saturer la capacité d'absorption de la Banque comme des pays. Le temps manquait pour l'analyse raisonnée ou la mise à l'essai des idées nouvelles; il n'y avait guère place pour l'application des méthodes participatives à la planification des projets; la préférence était donnée à la formule de l'enclave pour les activités d'exécution (par exemple en utilisant, pour exécuter les projets, des équipes autonomes composées de personnel expatrié, au lieu de créer d'abord une capacité d'exécution dans les ministères techniques concernés), et l'on avait tendance à soutenir, puis abandonner trop rapidement les initiatives nouvelles. Assurément, la Banque transféra alors plus de ressources et exécuta davantage de projets qu'elle ne l'eût fait en l'absence d'une aussi forte incitation à prêter, mais ce fut au prix d'une moindre durabilité des résultats.

La formule des besoins de base fut également une arme à double tranchant pour le secteur de l'éducation. D'un côté, elle conduisit la Banque à intervenir dans les domaines de l'éducation primaire et parascolaire dont elle s'était tenue éloignée jusqu'alors. En outre, comme on l'a vu plus haut, la Banque favorisa l'équité d'accès en encourageant les investissements, principalement dans les régions rurales pauvres. D'un autre côté, ce choix réduisit la priorité accordée à l'éducation secondaire et, plus encore, tertiaire. A l'origine, l'augmentation des prêts pour le primaire n'était pas censée se faire aux dépens du secondaire et du tertiaire. Au contraire, les établissements secondaires et tertiaires auraient dû être mobilisés pour jouer des rôles importants dans la lutte contre la pauvreté. Cependant, en raison des contraintes de temps, de personnel et surtout de moyens budgétaires — qui confinèrent à la crise dans bien des pays au cours des années 80 — ajoutées à l'idée que l'enseignement supérieur favorise les catégories de population déjà privilégiées, cette initiative porta finalement tort au secondaire et au tertiaire, contrariant le développement de l'éducation dans plus d'un pays.

Ce furent toutefois les conséquences de la crise économique des années 80 qui posèrent le plus grand problème pour l'action de la Banque dans le domaine de l'éducation en Afrique. Et ce problème fut difficile à surmonter pour les services de la Banque responsables du secteur de l'éducation, tout d'abord à cause des restrictions applicables à l'ensemble de la Banque et limitant l'appui financier aux opérations courantes, et ensuite, en raison de la compression du budget des prêts aux secteurs sociaux, imposée durant plusieurs années pour faire place aux prêts à l'ajustement structurel et concentrer les financements sur les secteurs plus directement productifs. Dans ces circonstances, la Banque pressa plus encore ses emprunteurs de rechercher l'efficacité interne, de pratiquer le recouvrement des coûts, surtout au niveau universitaire, et d'affecter les économies obtenues ainsi au secteur primaire pour le protéger contre de nouvelles réductions, alors même que de telles mesures étaient politiquement inacceptables dans la plupart des pays, surtout à un moment où les universités étaient elles-mêmes aux prises avec les pires difficultés financières. Ces dernières années, la Banque semble avoir fait machine arrière et préconisé plutôt des réformes de l'enseignement universitaire pour améliorer le fonctionnement à ce niveau, ce qui constitue un choix plus viable, produisant apparemment quelques effets positifs.

Depuis 1988, un certain nombre de contraintes pesant sur les interventions de la Banque se sont relâchées. Les prêts ont augmenté. Les restrictions du financement des coûts renouvelables ont été assouplies quelque peu. Plusieurs études consacrées spécialement à l'Afrique ont été exécutées et fournissent une meilleure base pour la conception des projets et pour la définition de conditions préalables pertinentes pour les opérations de prêt. L'idée que le développement sectoriel exige un meilleur équilibre entre les sous-secteurs semble être acceptée plus largement. Dans quelques cas — qui doivent plus aux inclinations personnelles des agents qu'à des initiatives de portée générale délibérées — une formule plus participative s'applique dans la conception des projets et produit des effets positifs. S'ils sont prometteurs, ces signes de changement restent cependant rares. Il est encore trop tôt pour dire si l'évolution est réelle et s'il en résultera un effet d'entraînement pour le reste de la région.

Ainsi, après des débuts hésitants et modestes, l'action de la Banque dans le secteur de l'éducation a subi de profondes mutations : de l'application d'une politique globale, à l'élaboration de mesures propres à une région et, de plus en plus, aux différents pays; de la fourniture d'un facteur critique — principalement les travaux de génie civil — à l'apport d'éléments de plus en plus nombreux parmi l'ensemble de moyens indispensables pour faire fonctionner un projet; de la recherche de l'expansion du système au souci d'en favoriser plutôt l'amélioration; enfin, d'une intervention limitée dans le domaine des grands principes d'organisation (sauf dans la mesure nécessaire à un projet donné) à une intervention considérable, englobant non seulement les problèmes de portée sectorielle, mais aussi des aspects non sectoriels qui sont importants pour les opérations entreprises dans le secteur.

L'aspect positif de cette évolution réside dans le surcroît d'efforts faits pour veiller à ce que la totalité des facteurs et des réformes des politiques générales nécessaires à la réussite d'un projet soit en place au moment voulu. L'aspect négatif tient à l'affaiblissement du sentiment de propriété de la part des institutions destinataires de l'aide et à l'aggravation de la dépendance envers l'appui extérieur pour réaliser des progrès. On est donc loin encore d'une formule capable d'améliorer durablement les capacités locales.

L'étude propose trois moyens de remédier à ces conséquences négatives. Le premier consiste à prendre du recul, à attendre davantage pour prêter, jusqu'à ce qu'existe un plus grand nombre des conditions nécessaires à la réussite de l'opération, tout en encourageant et en facilitant, entre temps, les mesures prises par le destinataire pour créer les conditions voulues. Le second moyen est de réduire la taille et la complexité des projets à un niveau correspondant aux capacités de conception et d'exécution disponibles dans le pays. Cette démarche a été recommandée à bien des reprises, mais l'étude n'a décelé aucune trace de son adoption concrète. Enfin, le troisième moyen est de consacrer moins de temps à la mise sur pied d'interventions de fond et davantage à l'établissement de mécanismes qui permettraient d'obtenir le même résultat de manière plus indirecte et, il faut l'espérer, plus efficace. Une procédure a notamment fait ses preuves : la création d'une caisse à laquelle chaque établissement peut s'adresser à titre concurrentiel pour obtenir le financement d'activités répondant à certains critères. Si l'on veut encourager et soutenir les meilleures initiatives possibles, cette procédure doit être ouverte à tous les établissements, privés et publics. Le texte de l'étude présente des exemples de l'application d'une telle formule, en Afrique et ailleurs.

## Assistance technique

Ces vingt dernières années, l'Afrique a reçu une part disproportionnée des fonds d'assistance technique de la Banque. Pourtant, la plupart des études des activités d'assistance technique (incluant la formation liée aux projets) révèlent des résultats décevants. Si l'assistance technique «relais» a, sous d'importantes réserves, fonctionné raisonnablement bien, celle de formation et de renforcement des institutions a consommé des montants considérables d'aide extérieure sans guère provoquer d'amélioration perceptible des capacités nationales. En réalité, par des voies subtiles, l'assistance technique pourrait bien augmenter la dépendance à l'égard de son maintien, plus qu'elle ne renforce les capacités locales.

Les propositions pour remédier à cette situation relèvent de cinq catégories : (1) améliorer les processus et procédures par lesquels l'assistance technique est fournie et gérée; (2) utiliser des formules différentes pour transférer les connaissances et renforcer les capacités; (3) améliorer l'environnement professionnel dans lequel l'assistance technique fonctionne; (4) éliminer les «distorsions de prix» sur les marchés des compétences de niveau supérieur; et (5) diminuer le besoin d'assistance technique, par exemple en réduisant ou en regroupant les opérations publiques, en simplifiant les projets et en employant des technologies à moindre intensité de compétences.

Les analyses de la Banque, ses recommandations et ses tentatives d'amélioration se sont rattachées principalement aux deux premières catégories. La plupart des recommandations relevant de la première catégorie prévoient de considérer l'assistance technique plus sérieusement : consacrer davantage d'efforts à la conception de programmes de formation, préciser les objectifs par référence à des améliorations de la capacité locale durable, faire participer l'emprunteur à la conception des projets, intensifier la supervision et suivre et évaluer attentivement les résultats. Les recommandations de la seconde catégorie prévoient de recourir davantage aux services de conseillers engagés à court terme et de consultants et chercheurs locaux, et d'établir des jumelages. Certaines d'entre elles semblent être appliquées effectivement. Néanmoins, l'écart reste grand entre la pratique et les recommandations.

La troisième catégorie porte sur la correction des problèmes sur le lieu de travail qui nuisent à la productivité des activités d'assistance technique, par exemple dans le cas des procédures d'administration et de gestion du personnel qui vont à l'encontre des incitations que les fonctionnaires pourraient avoir à mieux accomplir leurs tâches, ou lorsque manquent les facteurs complémentaires. La Banque a tenté de parer au plus pressé en renforçant les organes responsables de l'exécution des projets ou en créant des organes semi-indépendants à cette fin, en leur procurant du personnel expatrié, en fournissant des compléments de salaire et des fonds pour le matériel et les fournitures. Les mesures dans ce sens ont beaucoup aidé à améliorer l'exécution des différents projets, mais ne contribuent généralement guère à créer une capacité institutionnelle durable et perpétuent les distorsions sur les marchés du travail pour les compétences de niveau supérieur. Dans la perspective du plus long terme, la Banque cherche, surtout depuis quelques années, à promouvoir des programmes de réforme de la fonction publique et de l'administration. Les premiers tendent généralement à

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réduire les effectifs employés et à utiliser les économies réalisées pour améliorer les barèmes de rémunération et redresser les budgets de fonctionnement hors rémunérations; les seconds comprennent des mesures pour améliorer la gestion du personnel, les procédures budgétaires et les systèmes d'information, ainsi que le cadre juridique. Les évaluations de ces opérations ne font guère état de succès jusqu'à présent.

La quatrième catégorie de mesures cherche à redresser les distorsions sur les marchés des compétences de niveau supérieur qui favorisent l'engagement de personnel expatrié au lieu des Africains, poussant ces derniers à chercher des emplois hors de leurs marchés nationaux. La Banque s'est largement désintéressée de ce problème, tant dans ses analyses que dans sa pratique. L'étude présente plusieurs suggestions qui pourraient être utiles : par exemple, réviser les directives sur la passation des contrats d'assistance technique, qui tendent actuellement à méconnaître les considérations de coût; inciter systématiquement à la tenue d'une meilleure comptabilité qui mette en évidence le plein coût de l'utilisation des consultants étrangers et locaux; prévoir, pour le personnel d'assistance technique, des incitations à la réalisation rapide des objectifs de création de capacités; obliger les organismes destinataires de l'assistance technique à payer (le gouvernement central ou une caisse) en échange des services de consultants, même si ces services sont fournis gratuitement au gouvernement. Cette dernière suggestion serait probablement la plus efficace, mais aussi la plus difficile à mettre en pratique (parce qu'il faudrait obtenir l'accord des gouvernements et de tous les grands donateurs). En toute hypothèse, tant que les incitations du marché resteront ce qu'elles sont, les arrivées de personnel expatrié et les départs d'Africains qualifiés ont toute chance de se poursuivre et les efforts faits par la Banque pour améliorer les procédures et les modes de fourniture n'auront probablement qu'un impact marginal.

La dernière catégorie tend à influer sur les facteurs déterminants de la demande d'assistance technique : l'ampleur et la complexité croissantes des fonctions exercées par les administrations publiques, l'augmentation de l'aide étrangère et la nature du processus de développement lui-même. L'étude indique qu'il existe des possibilités raisonnables d'influer sur chacun de ces facteurs. La Banque n'a pas encore, là non plus, examiné pleinement les moyens utilisables.

## Recommandations

Durant les années 60 et au début des années 70, l'Afrique a renforcé considérablement sa capacité de gérer ses propres affaires et a entrepris de remplacer les expatriés par des nationaux aux commandes de l'économie. Pendant le reste des trente années examinées, le phénomène s'est ralenti et, peut-être même, inversé dans quelques pays. Les efforts des gouvernements, de la Banque et des autres donateurs en faveur de la valorisation des ressources humaines en Afrique n'ont pas suffi pour enrayer la détérioration intervenue durant la seconde moitié de cette période. En ce qui concerne la Banque, l'étude attribue cette impuissance à trois causes : la Banque a borné ses interventions à l'éducation, à la formation et à l'assistance technique, négligeant les nombreux autres facteurs qui influent sur la valorisation des ressources humaines; jusqu'à une époque récente, ces secteurs d'intervention ne jouaient qu'un rôle secondaire dans la stratégie de développement de la Banque pour la région; certaines activités menées par la Banque n'ont pas été aussi efficaces qu'elles auraient pu l'être et, à certains égards — étant donné le caractère des opérations de la Banque — ont même peut-être eu des effets contraires au but recherché. Durant la majeure partie de ces trente années, la Banque n'a pas donné l'impression d'adhérer à l'idée d'Eugene Black (voir page 27 suivant) selon laquelle la valorisation des ressources humaines est un préalable indispensable à l'utilisation judicieuse et efficace des investissements étrangers.

Si l'action de la Banque s'inspirait de cette idée, en quoi pourrait-elle changer? Tout d'abord, modification capitale, le renforcement des capacités (humaines et institutionnelles) deviendrait l'objectif central des activités et il faudrait établir des indicateurs vérifiables des progrès, permettant d'apprécier si cet objectif est en voie d'être atteint.

Ensuite, elle prendrait régulièrement du recul pour envisager tous les besoins prioritaires de chaque pays concerné en matière de ressources humaines, tous les moyens utilisables pour répondre à ces besoins et, secteur par secteur, les possibilités d'améliorer la situation en agissant aussi bien sur la demande que sur l'offre.

Troisièmement, il est probable qu'apparaîtraient des programmes, des projets et des modalités de financement de types nouveaux. Par exemple :

- Un tel recentrage de l'activité encouragerait sans doute la recherche de moyens de financement des stratégies plus stables que les procédures utilisées actuellement pour des projets autonomes, au coup par coup et de durée limitée. Les modalités de financement du Fonds pour le renforcement des capacités en Afrique sont un exemple prometteur des possibilités à explorer.
- De nouvelles initiatives de portée générale pourraient apparaître : par exemple, des tentatives concertées de corriger les distorsions de prix sur les marchés du travail pour les compétences de niveau supérieur, des efforts redoublés pour promouvoir l'initiative individuelle en encourageant le développement de petites entreprises fondées sur l'emploi des technologies et des niveaux de compétences intermédiaires existants, enfin, un plus large recours au secteur privé pour la fourniture des services d'éducation, de formation et de recherche.
- A l'intérieur du secteur de l'éducation, cette attitude nouvelle encouragerait probablement un redéploiement dans trois directions :

Un plus grand souci d'obtenir un développement équilibré et intégré du secteur. Il faudrait sans doute utiliser plus abondamment les prêts-programmes et, dans certains cas, centrer davantage l'action sur l'enseignement supérieur, dans le but exprès de former et de retenir au pays les nationaux qualifiés qui permettraient de réduire la dépendance à l'égard des experts étrangers dans les fonctions opérationnelles.

La recherche plus active de moyens rentables d'offrir une formation ayant une valeur sociale et productive à la multitude de personnes (sans cesse plus nombreuses dans la plupart des pays) peu susceptibles de tirer vraiment profit d'un enseignement suivant la voie scolaire traditionnelle. On pourrait, par exemple, utiliser davantage les techniques du télé-enseignement et l'exécution de projets intersectoriels mêlant des activités créatrices de revenu à des programmes d'éducation.

L'utilisation plus fréquente de mécanismes de financement récompensant l'excellence : des modalités de financement par concours pour les établissements d'éducation et de recherche, fonctionnant suivant des principes analogues à ceux utilisés pour les fonds sociaux (voir Chapitre 2), et/ou un régime d'allocations, de bons ou de redevances par élève (voir Chapitre 3) qui lie plus étroitement les budgets scolaires à l'appréciation des résultats par les parents, et, bien entendu, l'octroi de bourses aux étudiants sur la base des résultats obtenus.

Quatrièmement, certaines procédures de la Banque et la nature d'un certain nombre

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d'opérations changeraient de manière à favoriser délibérément le sentiment de propriété et le renforcement des capacités. Par exemple, les fonctionnaires de la Banque et ses consultants s'abstiendraient de rédiger les rapports et les études qui devraient, pour maximiser l'effet de renforcement des capacités, être rédigés par le personnel national.

Enfin, la Banque prendrait plus au sérieux les fonctions de supervision, de suivi et d'évaluation des projets pour l'éducation et des projets d'assistance technique. Il faudrait, à tout le moins, que les projets procèdent d'une stratégie d'ensemble pour la valorisation des ressources humaines et soient justifiés par référence à cette stratégie, que des indicateurs vérifiables des progrès soient définis et que les évaluations de la situation de départ et de la situation en fin de projet deviennent systématiques. Ultérieurement, on procéderait à une forme ou une autre d'analyse coût-avantage ou, au moins, à une analyse coût-efficacité, afin de pouvoir mesurer l'impact de développement produit par les projets.

Nul ne prétend que de telles modifications, même appliquées avec ardeur et en coopération avec les autres donateurs, suffiraient d'elles-mêmes à provoquer le type de progrès dans la valorisation des ressources humaines que chacun souhaite pour l'Afrique. Un trop grand nombre de facteurs interviennent sur lesquels nul n'a guère de prise et qui échappent particulièrement au contrôle d'un organisme extérieur tel que la Banque. Au minimum, cependant, elles devraient faciliter le progrès, car elles préciseraient les objectifs, élimineraient les signaux confus et apporteraient des solutions de rechange dont on peut espérer qu'elles seraient plus efficaces.

# 1. The Problem

*The basic requirement for the faster development of the new nations in Africa...is more education and training at all levels—a more generally literate working force, more skilled artisans, more members of the learned professions, more entrepreneurs, more skilled government administrators. Until the human resources of the new African nations are more fully developed—and no huge injection of money can greatly accelerate that process—the opportunities for the wise and effective utilization of foreign investment will necessarily remain limited.*

Eugene Black, address to UN Economic and Social Council, April 7, 1960.[1]

## Objective and Coverage of Report

This study describes and evaluates the role that the World Bank has played in promoting human resource development (HRD) in the countries of Sub-Saharan Africa (SSA) and assisting them in overcoming shortages of skilled and trained manpower.[2] These shortages have been a greater constraint on social and economic development in Africa than elsewhere, and as a consequence governments and development agencies have devoted considerable efforts to overcome them during the last three decades. Despite these efforts—and despite substantial progress in many cases—economic growth rates have been discouragingly low, and human resource shortages remain high on the list of reasons given for this situation. Why has this been the case? What role has the Bank played? What can be learned from past experience that might be instructive for the future? These are the questions that have motivated this study.

The focus is on Bank efforts made through project support, policy statements and sector work in the education, training, and technical assistance (TA) fields. Where possible, Bank efforts in these areas are compared with similar efforts in other parts of the world. Other relevant Bank actions—for example Bank support for agricultural extension and the programs of the Economic Development Institute—are not covered in this report.

Evidence used in this study comes from a variety of sources. A statistical overview was developed that permits comparison of Bank operations in this field in Africa with its operations in other parts of the world and with other assistance operations in Africa. Because of its broader coverage and value for other purposes as well, it has been published separately. Four case studies (covering Cameroon, Malawi, Senegal, and Tanzania) were undertaken to provide the author with more understanding of field conditions and a better basis for interpreting written materials. The most important source of information is OED and other Bank studies plus interviews with Bank staff. A variety of non-Bank studies was also utilized.

It is not possible in the scope of one study to do justice to all the topics and all the countries that the title to this study suggests might be included. The main focus is on Bank operations reflected in sector work and projects in the fields of education and technical assistance. This has resulted in relative neglect of more general Bank efforts to assist, promote, and mobilize support for human resource development in Africa, for example, the Economic Development Institute, the Africa Capacity Building Initiative, and collaborative work with other donors and United Nations agencies. Space, time, and data limitations also made it necessary to be selective even within the areas of main focus. The result is a study whose generalizations must be applied with caution in specific country settings. At a minimum, however, they should serve as guides to further work in important areas.

The remainder of this chapter sets the stage by presenting an overview of the problem and its likely causes, the efforts made to resolve it, and an indication of how much has been accomplished since independence. The next two chapters focus on education, the first on the history and evolution of Bank involvement, and the second on a few key issues that the study believes warrant more detailed attention. Chapter 4 focuses on technical assistance and training issues and the Bank's approach to these subjects. The last chapter presents conclusions and implications for future efforts.

## The Human Resource Situation

Human capacities—problem solving abilities, command of relevant factual information, and technical, managerial and entrepreneurial skills—are acquired through education and experience (learning by doing). On both counts, African nations achieved independence with severe deficits. Few persons had ever been to school, let alone attended school beyond the primary level; and few had skills beyond those needed for subsistence agriculture and petty trading activities. During the last 30 years, considerable progress has been made. But overall, it has not been sufficient to narrow the gap between Africa and other developing regions or to significantly reduce Africa's dependence on expatriates for the operation of many vital functions. Moreover, most of this progress was made during the 1970s; during the 1980s, there have been some reversals. Particularly worrisome is the reduction in the capacity of many education systems to produce the numbers and qualities of educated persons needed by these societies to take leadership roles in science, technology, management, and business. A review of data on the stock of trained persons, use of expatriates, and capacity of the education systems makes these points quite clear.

### *Stocks of Human Resources*

Table 1 provides a picture of the educational attainment of Africa's adult population over time compared to that of other developing regions.[3] Annex Tables 1 and 2 provide evidence for females and for individual countries.[4] These materials suggest the following findings:

- In 1960, the differences in educational attainment of adults (population over 25 years) in African and in all developing countries covered by the study were minimal, except for higher education where Africa's percent was significantly less. Since then, considerable progress has been made, but less in Africa than elsewhere. For example, the percent of adults with no schooling fell from 71 to 54 percent in Africa while it fell from 69 to 50 percent in all developing countries. Similarly, the average years of education acquired by adults increased from 1.6 to 2.4 in Africa while increasing from 1.7 to 3.6 in all developing countries. Thus while Africa has made steady progress, it has lagged behind the rest of the developing world.

- Most of Africa's progress was made at the primary level. Indeed, by 1980, a larger fraction of Africa's adult population had been exposed to some primary schooling than was the case elsewhere. But the smaller figures for completion of primary school reflect the fact that dropout rates are higher in Africa, and the pattern of the numbers indicates that these rates have increased over time. The percents completing primary and secondary school have hardly increased at all over the 25-year period covered, and the percent having some higher education has increased from its extremely low base by only 150 percent compared to 450 percent in all developing countries.

- The variance between countries is substantial. Considering where it was in 1960, Congo's progress is among the most impressive quantitatively (though it has come at the expense of quality): between that year and 1985, average years of schooling increased from less than 0.5 to over 3, the percent of adult population with some primary schooling increased from 0.1 to 21, and the percent with some higher education increased from next to zero to 3. Cameroon's progress has been almost as impressive, though not at the higher level. Malawi and Senegal are closer to the regional averages. In contrast, there has been little absolute progress in Mali: average years of schooling increased from 0.1 to 0.8, and the percent with some primary from 1.3 to 8.6. School attainment in three countries—Mozambique, Niger, and Tanzania—has actually declined. The Tanzania figures are so striking that they may in fact be incorrect: according to Annex Table 2, average years of schooling declined from above 4 to almost 2 and the percent with some primary declined from 81 percent to 44 percent.

- Despite overall progress, the percent of the adult population with no schooling has

**TABLE 1: TRENDS IN EDUCATIONAL ATTAINMENT FOR 29 SUB-SAHARAN AFRICA COUNTRIES**

| Region/Group<br>Year | Pop. over 25 (m) | Percent of Population over 25 by Level of Schooling | | | | | | | Avg. Years of School |
|---|---|---|---|---|---|---|---|---|---|
| | | No | Primary | | Secondary | | Higher | | |
| | | Schooling | Total | (Complete) | Total | (Complete) | Total | (Complete) | |
| *Sub-Saharan Africa (29)* | | | | | | | | | |
| 1960 | 47 | 70.5 | 23.6 | (7.3) | 5.4 | (1.4) | 0.4 | (0.3) | 1.60 |
| 1965 | 53 | 69.5 | 24.4 | (6.4) | 5.5 | (1.4) | 0.6 | (0.5) | 1.62 |
| 1970 | 60 | 67.8 | 24.9 | (5.6) | 6.3 | (1.5) | 1.0 | (0.8) | 1.76 |
| 1975 | 68 | 63.9 | 28.5 | (6.1) | 6.6 | (1.4) | 0.9 | (0.7) | 1.91 |
| 1980 | 77 | 58.8 | 32.7 | (6.6) | 7.6 | (1.5) | 0.9 | (0.7) | 2.16 |
| 1985 | 89 | 54.4 | 36.0 | (7.6) | 8.7 | (1.6) | 1.0 | (0.8) | 2.41 |
| *Developing Countries (83)* | | | | | | | | | |
| 1960 | 487 | 69.3 | 25.5 | (8.2) | 4.4 | (1.7) | 0.8 | (0.6) | 1.70 |
| 1965 | 43 | 66.6 | 26.9 | (9.4) | 5.4 | (2.1) | 1.2 | (0.8) | 1.94 |
| 1970 | 609 | 62.6 | 28.8 | (10.5) | 6.9 | (2.7) | 1.7 | (1.2) | 2.28 |
| 1975 | 684 | 58.4 | 30.0 | (8.5) | 9.1 | (3.6) | 2.5 | (1.7) | 2.59 |
| 1980 | 782 | 55.9 | 28.1 | (8.5) | 12.7 | (5.1) | 3.2 | (2.2) | 3.04 |
| 1985 | 905 | 49.6 | 31.7 | (10.4) | 14.4 | (5.8) | 4.4 | (3.0) | 3.58 |

*Source:* Barro and Lee, 1993.

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remained high for many countries. Even as late as 1985, there were five countries (Benin, Gambia, Guinea-Bissau, Mali, and Niger) with more than 80 percent of their adult populations having no schooling at all. The best cases were Lesotho, Mauritius, Seychelles, and Zimbabwe, where between 20 and 30 percent of the adult populations had no schooling in 1985.

- Female education attainment has been almost half that of males since 1965 and has shown no tendency to improve (see Annex Table 2). While the figures for all developing countries are similar, some modest improvement has occurred. There has, however, been substantial improvement in the number of females exposed to some primary education—indeed, more improvement than in the case of males—but a deterioration in the percent completing primary and secondary schooling (Table 1).

Other measures of the stock of human capital are more difficult to find, but the few that exist point in the same direction. According to UNESCO (1991), in the first half of the 1980s, Africa (all Africa excluding Arab States) had one-sixth the number of scientists and technicians per capita relative to that in other developing countries: 831 and 1,376 per 100,000 population in 1980 and 1985 compared to 6,263 and 8,263 per 100,000 for all developing regions. According to the Bank's *World Development Report 1992*, Sub-Saharan Africa had one physician per 33,310 persons in 1965 and one per 26,670 in 1984. The ratio is 25 percent of that in all low and medium income countries in 1965 and 18 percent in 1984.

### *Expatriates and Technical Assistance Personnel*

The skill shortages suggested by these numbers, especially at more senior levels, are reflected in the numbers of expatriates working in Africa and in the types of tasks they are performing. During the mid-1960s, manpower surveys found that expatriate employment as a percent of total employment of trained manpower was 13 percent in Nigeria, over 40 percent in Botswana, Côte d'Ivoire, and Kenya, and 68 percent in Zambia; and that for most countries, over three-fourths of "higher level" (university-trained) manpower was foreign.[5] While many of these positions are now filled by Africans, the need for high-level skilled manpower has rapidly expanded and many well-trained Africans have left for better positions outside Africa. The result, some thirty years after independence, is continued heavy dependence on human capital from external sources, far higher than exists in other developing regions.

Estimates of the number of resident advisors, consultants and experts in SSA during the 1980s have ranged from 40,000 to 100,000 and are thought to be roughly half of those working in all developing countries.[6] A surprisingly large number, even today, are mid-level technicians serving in operating positions, as, for example, accountants, mechanics, agricultural technicians, and secondary teachers. Carl Eicher[7] notes that expatriates currently account for about one-third of agricultural researchers and teachers in faculties of agriculture in African universities—two-thirds of agricultural researchers in Côte d'Ivoire and two-thirds of the permanent posts in the Faculty of Veterinary Medicine at the University of Zimbabwe. Moreover, the number of technical assistance personnel has increased in some countries, for example, in the industrial sector of Côte d'Ivoire and in Tanzania where, according to government statistics, the number tripled from 155 in 1970–71 to 467 during the 1980–87 period.[8]

These expatriates often provide invaluable services. Without them, there would be no medical schools, agricultural research institutes, physics departments, or modern telecommunication systems in many African countries. But there are increasing concerns that they sometimes provide the wrong advice (for example about technological choices, organizational arrangements, and managerial control systems more appropriate to the countries from which they came), sometimes crowd out locally available skills (because their services are paid for with grant aid), may have high opportunity cost (because they are expensive for the donor agency and may therefore be displacing other forms of aid), and in a number of different, sometimes subtle ways, may be increasing dependence on the continuation of their services. The discussion of technical assistance in Chapter 3 elaborates on these points.

***Capacity of the School Systems***

Part of the problem has been the limited capacity of Africa's education systems. Using gross enrollment rates as an indicator of capacity,[9] progress was impressive during the late 1960s and 1970s. During the 1980s, however, largely because of financial problems, enrollment rates declined for primary and only marginally increased for secondary and tertiary education. As Figure 1 indicates, growth has been slower in Africa than in other developing regions over the whole period. Here again, there are significant differences in individual countries. Cameroon has made steady, impressive progress at the primary level (albeit at the expense of quality); indeed, its enrollment rates have been higher than those recorded for low-middle income countries generally. In contrast, Tanzania, after a crash program to achieve universal primary enrollment in the 1970s, found itself overextended financially; since then its primary enrollment rate has declined to the SSA average. At secondary and tertiary levels, its enrollment rates, along with those of Malawi, are among the lowest observed in the world.

An equally, if not more, serious problem has been the low and deteriorating level of educational quality. While excellent educational institutions can be found in SSA, standardized examination scores suggest that the average quality of education is lower there than elsewhere, and certainly lower by most reasonable standards of what should be achieved.[10] More serious, most observers believe that the situation has deteriorated. The rapid expansion of the primary systems during the 1970s resulted in the addition of large numbers of unqualified teachers. Deteriorating economic conditions during the 1980s added to these problems by reducing budgets for textbooks, teaching materials, maintenance, and real salaries. At the university level, where teachers have more options outside of universities, there has been a steady exodus of more experienced and qualified staff. The deterioration at the university level is particularly severe and worrisome. Symptomatic of this deterioration are "poor performance in university examinations..., reduced rigor in...recruitment and promotion...of staff, reduced levels of research and publications output, and complaints by employers regarding the inability of university graduates to perform."[11] The Zambian educator, Trevor Coombe, provides a more graphic picture:

> *One of the abiding impressions...is the sense of loss, amounting almost to grief, of some of the most senior professors in the older African universities as they compare the present state of their universities with the vigor, optimism and pride which the same institutions displayed twenty or thirty years ago. It is not just the universal regret of age at the passing of youth, nor the sad awareness that a generation of unique academic pioneers has almost run its course. It is also the grim knowledge that the nature of the university experience today is profoundly different for many teachers and students, so different and so inferior that some wonder whether it can rightly be called a university experience at all.*[12]

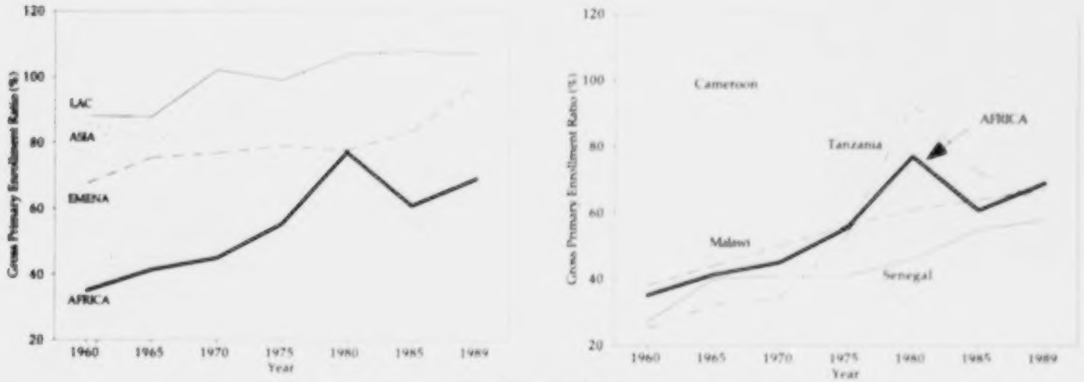
## Principal Causes

The principal causes of this situation, especially the persistence of shortages of trained Africans

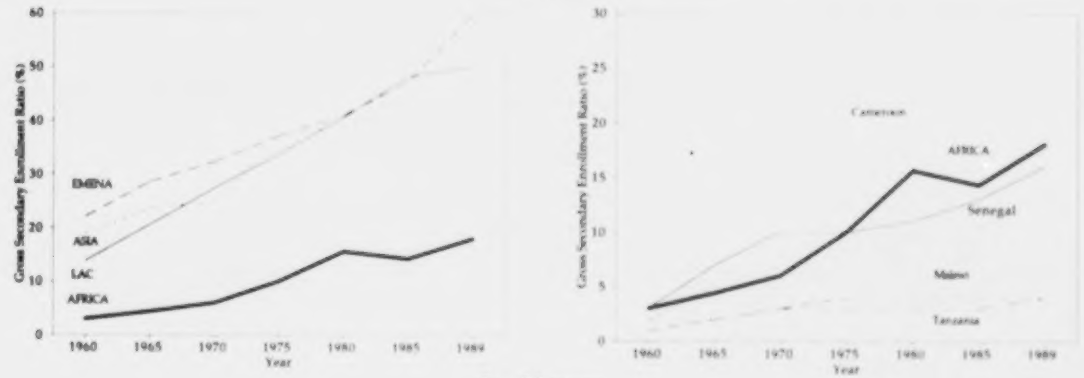
**FIGURE 1: GROSS ENROLLMENT RATES**

REGIONS SELECTED COUNTRIES

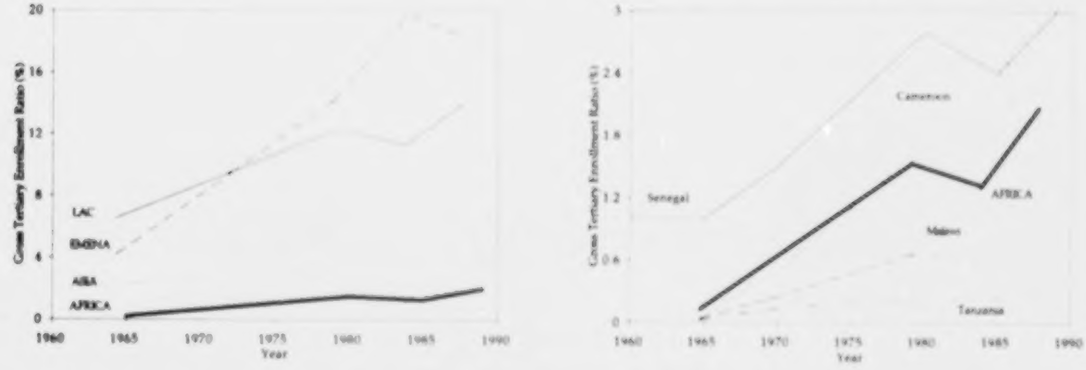
### A. PRIMARY



### B. SECONDARY



### C. HIGHER



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for higher level positions, can be grouped under three headings: the character of development strategies in SSA, financial and other problems plaguing the education system, and the character of the labor markets for higher level skills.

### *The Character of Africa's Development Strategies*

The development strategy adopted by most African governments and supported by most donors during the 1960s and early 1970s involved rapid expansion of government services, nationalization of many businesses, large-scale government investments in industry, neglect of agriculture, especially peasant agriculture, overvalued exchange rates, and control over foreign and domestic trade. This strategy had at least two negative effects on human resource development (apart from its effects on resources available for education and training, discussed below).

First, it dramatically widened the gap between demand and supply of skilled manpower. The immediate effect (particularly of nationalization) was to cause skilled Europeans and Asians to leave more quickly than they might otherwise. The longer-run and more serious effect was the establishment of large-scale, complex organizations, frequently based on capital- and import-intensive technologies, which required highly trained and experienced technicians and managers to operate properly. Little effort was made to select development approaches or technologies that would conserve on this most scarce factor of production. Instead, foreign experts were brought in to operate these complex systems with the notion that they would be replaced by nationals as soon as they could be trained.

Several factors explain this approach: the development philosophy of the 1960s and 1970s that encouraged state ownership and control, the desire to be "modern," the involvement of foreign engineering firms which tend to recommend technologies with which they were familiar rather than trying to find and adapt indigenous technologies, and donors and development institutions, including the World Bank, which had an interest in getting on with the job as rapidly as possible.

The failure to take human resource constraints into account in designing projects has not gone unnoticed. As early as 1981, it provided the basis for one of the main conclusions of the Bank's first comprehensive review of African economic problems:

> *...project design should not proceed as though there were no local management constraints on the implicit assumption that managers will be imported. Project designers should generally make precisely the other assumption: that the project will be locally managed. Its scale and complexity should then be shaped accordingly. There may be technical or economic considerations that rule this out...but these should be explicitly assessed.*[13]

Second, this growth strategy often inhibited the development of small-scale, indigenous, entrepreneurs. In the typical pattern of development, farmers, petty traders, repairmen, and craftsmen producing inexpensive consumer articles slowly gain experience and capital with which to expand their operations. This pattern explains the growth of medium- to large-size enterprises in most countries in the world, including, in Africa, Mauritius and Nigeria. But these are rare cases in Africa. More typically, growth of small enterprises has been constrained by lack of effective demand because of low agricultural income, difficulties in competing with parastatals for credit, foreign exchange, and government contracts, and a variety of administrative obstacles. Indeed, for long periods in some countries they have been prohibited from entering some markets (e.g., until recently, foodgrain trading in many countries). These biases against small enterprises have restricted the development of medium-sized firms and in the process severely limited the acquisition of many of the skills and capacities required to effectively operate and compete in many modern sectors.

The result, with a few exceptions, is a much more bipolar economic structure than observed in other developing regions: a constrained small-scale sector with limited opportunities and a large-scale sector consisting of parastatals plus a few foreign firms, both employing large numbers of expatriates. Medium-sized operations utilizing intermediate technologies that conserve on Africa's scarcest factor of production—human capital—are hard to find. In these ways, the development strategy pursued inhibited the development, through experience, of the skills and attitudes that are critical elements in the modernization process.

### *Financial and Other Problems of the Education Sector*

The principal explanations for the failure of the education system to expand more rapidly without loss of quality has been constrained and deteriorating budgets, high costs and inefficient use of available resources (a result, among other things, of weak management), and rapid population growth. In some instances these problems have been exacerbated by the centralization of education systems that occurred at the time of independence and inappropriate allocation of resources within the education sector.

This failure does not appear to have resulted from lack of effort in most countries. As Table 2 indicates, these countries devoted a larger share of their GNP and almost an identical share of their public expenditures to education than did developing countries in general.

But these percentages were applied to a slowly growing GNP, with the result that growth in real terms in public education budgets were severely constrained. As Figure 2 demonstrates, this growth was insufficient to keep up with population growth during much of this 30-year

TABLE 2: PUBLIC EDUCATION EXPENDITURES, SELECTED REGIONS AND COUNTRIES

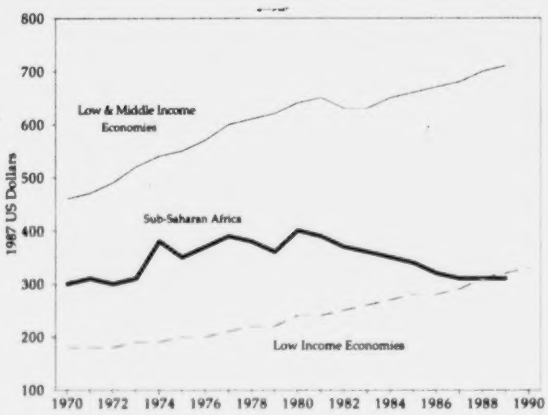
| | *Percent of GNP* | | *Percent of Public Expenditures* | *Higher Education as % of All Levels* | *Third Level Students Abroad as % Those at Home* |
|---|---|---|---|---|---|
| | *1960* | *1989* | *1989* | *1988* | *1987–88* |
| All Developing Countries | 2.2 | 3.6 | 17.9 | 17.2 | 2.9 |
| Least Developed Countries | 1.3 | 3.1 | 14.8 | 14.1 | 7.9 |
| Sub-Saharan Africa | 2.4 | 4.1 | 17.5 | 15.3 | 14.2 |
| *Selected Countries* | | | | | |
| Cameroon | 1.7 | 3.3 | 18.7 | 22.0 | 40.3 |
| Tanzania | 2.1 | 3.7 | 14.0 | 11.1 | 31.4 |
| Nigeria | 1.5 | 1.5 | 12.0 | | 6.8 |
| Senegal | 2.4 | 4.6 | | | 23.0 |
| Malawi | 2.1 | 3.3 | 8.8 | 22.9 | 13.9 |
| Kenya | 4.6 | 6.5 | 27.0 | 16.6 | 17.3 |
| Korea | 2.0 | 3.6 | 23.3 | 14.5 | 1.9 |
| Brazil | 1.9 | 3.7 | 17.7 | 7.0 | 0.5 |
| Indonesia | 2.5 | 0.9 | | 17.6 | 1.6 |

*Source:* UNDP, *Human Development Report*, 1992, Table 15.

period. Table 3 provides evidence on this and its impact on education expenditures per capita for individual countries. For example, over the period 1980–84 to 1985–89, 18 of the 27 countries for which data are available in that table experienced declines in real per capita expenditures on education, and in 15 of these cases, these declines were associated with declines in GDP per capita. In addition to constraining public expenditures, the decline in per capita income during the 1980s must have severely reduced private education expenditures as well. While there are no good figures on this, econometric studies from other parts of the world indicate that the income elasticity of expenditure on education is often above 0.5, suggesting that very substantial declines in expenditure could have occurred.

The other side of this coin is Africa's rapid population growth. Between 1965 and 1985, the population in age group 6–11 in Kenya increased by more than 4 percent per year while that in Nigeria increased by 3.6 percent per year. In most other developing countries, this age group grew by closer to 2 percent per year, and in the rapidly growing economies ofHong Kong, Korea, and Singapore, the absolute size of this age group actually declined. These differences in population growth rates can make an enormous difference in outcomes. To take an extreme case, if in 1988, the school-age population of Korea were the same size as that of Kenya, it would have taken 6.5 percent of GNP to maintain enrollment rates at the level actually achieved instead of the 3.8 percent actually spent—a savings of 2.7 percent of GNP per year because of Korea's low fertility rates.[14]

FIGURE 2: GROSS NATIONAL INCOME PER CAPITA FOR SELECTED REGIONS (1987 US DOLLARS)



*Source:* World Tables 1992.

In addition, however, costs per student have been substantially higher in Africa than in other developing countries. This was certainly true during the 1960s and 1970s when teacher salaries as a percent of per capita incomes were estimated to be at least five times higher in Africa.[15] The World Bank's 1980 *Education Sector Working Paper*, for example, estimated that, as percentages of GNP per capita, these costs in various regions were:

| | *Primary* | *Secondary* | *Higher* |
|---|---|---|---|
| East Africa | 20 | 124 | 92 |
| West Africa | 24 | 142 | 1,045 |
| Asia | 47 | 22 | 92 |
| Europe, M. East, N. Africa | 205 | 306 | 121 |
| Latin America | 11 | 22 | 121 |

Because of inflation and deteriorating government budgets during the last 15 years, which have dramatically eroded the real value of civil service pay, this picture may be significantly different today. However, other reasons for higher cost—high dropout and repetition rates,[16] which increase costs per *graduate*, large student subsidies especially at higher levels, and managerial inefficiencies—continue to plague most education systems in SSA.

Some analysts have suggested that IMF and World Bank adjustment programs, which have

## TABLE 3: REAL ANNUAL PER CAPITA EDUCATIONAL EXPENDITURES OF CENTRAL GOVERNMENTS *(Averages over selected years)*

| | *US$, 1987 Prices* | | | | | | *Percent Change* | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *Education Per Capita* | | | *GDP Per Capita* | | | *Education Per Capita* | | *GDP Per Capita* | |
| *Countries* | *1975–1979* | *1980–1984* | *1985–1989* | *1975–1979* | *1980–1984* | *1985–1989* | *75/79–80/84* | *80/84–85/89* | *75/79–80/84* | *80/84–85/89* |
| **Benin** | 12.3 | | | 341 | 444 | 412 | | | 30.3 | -7.2 |
| **Botswana** | 33.7 | 65.5 | 79.8 | 615 | 920 | 1,328 | 94.4 | 21.8 | 49.6 | 44.5 |
| **Côte d'Ivoire** | | 67.6 | | 1,152 | 1,137 | 987 | | | -1.2 | -13.2 |
| **Cameroon** | 14.3 | 20.9 | 31.5 | 762 | 1,128 | 1,161 | 45.7 | 50.9 | 48.1 | 2.9 |
| **Comoros** | | 49.5 | 41.2 | | 201 | 481 | | -16.8 | | 138.6 |
| **Congo** | 49.2 | | | 793 | 1,192 | 1,166 | | | 50.4 | -2.2 |
| **Ethiopia** | 2.6 | 3.5 | 4.0 | | 126 | 118 | 31.5 | 16.6 | 3.7 | -6.6 |
| **Ghana** | 10.2 | 7.5 | 11.4 | | 395 | 392 | -25.8 | 51.0 | -9.4 | -0.9 |
| **Gambia, The** | 4.9 | 10.0 | 4.4 | | 244 | 243 | 105.4 | -56.0 | 1.4 | -0.3 |
| **Guinea-Bissau** | | 10.3 | 5.8 | | 171 | 186 | | -43.7 | -13.8 | 8.7 |
| **Burkina Faso** | 5.0 | 5.2 | 5.3 | | 281 | 317 | 5.4 | 1.8 | 8.9 | 12.7 |
| **Kenya** | 13.1 | 18.1 | 19.5 | | 373 | 376 | 38.5 | 7.6 | 8.4 | 0.7 |
| **Liberia** | 20.6 | 24.9 | 18.6 | | 633 | 315 | 21.2 | -25.2 | -11.7 | -50.3 |
| **Lesotho** | 23.8 | 32.1 | 33.7 | | 225 | 231 | 34.9 | 4.9 | 10.4 | 3.0 |
| **Madagascar** | | 8.2 | 6.0 | | 281 | 256 | | -26.8 | -10.6 | -8.9 |
| **Mauritania** | 17.7 | | | | 545 | 527 | | | 1.1 | -3.4 |
| **Mauritius** | 44.3 | 56.4 | 52.2 | | 1,331 | 1,737 | 27.3 | -7.6 | 2.7 | 30.5 |
| **Malawi** | 3.9 | 5.5 | 5.1 | 167 | 174 | 169 | 41.9 | -8.1 | 4.5 | -3.0 |
| **Niger** | 8.0 | 9.9 | 7.5 | 403 | 419 | 323 | 24.1 | -24.2 | 3.9 | -23.0 |
| **Nigeria** | 5.8 | 4.0 | 1.8 | 327 | 297 | 248 | -31.8 | -54.3 | -9.1 | -16.4 |
| **Rwanda** | 5.9 | 11.5 | 10.7 | 295 | 366 | 336 | 95.6 | -6.6 | 24.2 | -8.3 |
| **Sudan** | 8.4 | 12.8 | | 835 | 476 | 435 | 52.1 | | -43.0 | -8.7 |
| **Senegal** | | 31.9 | 12.2 | 708 | 693 | 693 | | -61.6 | -2.1 | -0.1 |
| **Sierra Leone** | 4.4 | 5.3 | 2.3 | 158 | 183 | 162 | 18.6 | -57.0 | 15.9 | -11.4 |
| **Somalia** | 2.5 | 1.7 | 0.6 | 149 | 180 | 179 | -31.5 | -67.3 | 20.5 | -0.5 |
| **Swaziland** | 36.9 | 55.2 | 55.3 | 845 | 812 | 830 | 49.5 | 0.3 | -3.9 | 2.2 |
| **Togo** | 16.5 | 23.4 | 16.6 | 432 | 438 | 402 | 42.2 | -29.0 | 1.3 | -8.2 |
| **Tanzania** | 5.6 | 5.5 | 2.3 | 170 | 159 | 157 | -2.3 | -57.7 | -6.3 | -1.5 |
| **Uganda** | 3.8 | 2.6 | 2.4 | 313 | 315 | 292 | -31.5 | -7.4 | 0.4 | -7.2 |
| **Zaire** | 4.8 | 3.6 | 1.6 | 270 | 261 | 248 | -26.4 | -54.5 | -3.6 | -4.7 |
| **Zambia** | 17.1 | 14.9 | 9.2 | 384 | 346 | 299 | -13.3 | -38.4 | -10.0 | -13.4 |
| **Zimbabwe** | 20.8 | 42.7 | 50.6 | 627 | 669 | 630 | 105.5 | 18.5 | 6.6 | -5.7 |

*Note:* Averages are for years available.
*Source:* World Bank, Africa Development Indicators, 1992.

focused on cuts in government expenditures to reduce inflation and the balance of payments deficit, are another factor explaining the failures of the education sector during the 1980s.[17] But the most recent information for African countries reveals no clear pattern of decreases or increases in spending on education or in the level of effort measured by the share of discretionary government expenditure (excluding interest payments) devoted to education as a consequence of the adjustment operations.[18] A comparison of education spending patterns in 16 countries that embarked on structural adjustment programs three years before and three years after initiation of the program indicated the following numbers of countries experiencing increases and decreases:

| | *Real Education Expenditure* | *Education as % Discretionary Gov't. Expenditure* |
|---|---|---|
| Increases | 8 | 5 |
| Decreases | 6 | 8 |
| No Appreciable Change | 2 | 3 |

The most recent OED report on structural adjustment lending corroborates this irregular pattern for the eight cases it reviews in detail.[19] These studies suggest that the deterioration in education spending is not the consequence of adjustment loans, but rather, the result of the governments' inability to provide ade-quate services in the light of economic stagnationor decline, a situation that has continued despite the efforts of the adjustment programs.[20]

In all but the most extreme cases, the Bank's approach to dealing with this situation has been to promote improved efficiency in use of public resources and cost recovery. But unless there is substantial economic recovery in the near future, such measures will not be sufficient in most countries. Where they are not, more structural solutions, for example, a reduction in central government responsibilities to levels more commensurate with their limited resource and managerial capacities, need to be considered. While proposals for such a reduction must also consider the limited capacities of alternative agencies—local governments and communities, the private sector, and NGOs—it is likely that some devolution of responsibilities would be appropriate in many cases. The centralization of functions that occurred after independence served a number of important social goals;[21] now, 30 years later, this issue needs careful reconsideration.

### *Character of Labor Markets for Higher Level Skills*

The third factor with operational relevance that helps explain the continued shortages of skilled Africans has to do with the operation of the labor markets for these skills, which causes expatriates to be hired in place of Africans and Africans to seek employment outside their local market. While data and analysis of the operation of these markets are scarce, the following picture is probably close to the mark.[22]

During colonial times, there was virtually no mobility between the labor markets for Africans and expatriates. In the African markets for higher level skills, both supply and demand were negligible, and wages for the few positions available were substantially below those for comparable positions in the expatriate market. Independence dramatically increased the demand for Africans with higher level skills; and wages shot up, often to levels comparable to those that prevailed in the expatriate labor markets. Since then, there have been strong social pressures to expand government functions and employment and to reduce the disparities in wage scales. By the mid 1970s, these pressures, combined with inflation and increasingly tight government budgets, resulted in dramatic declines in civil service remuneration, especially for higher level staff. In Ghana, the real salary of a permanent secretary in 1982 was only one-eighth of what it was in 1977, and the ratio between the highest and lowest paid civil servant was 2.3:1 before taxes and 1.5:1 after taxes; in Uganda, the real wage of a permanent secretary in 1988 was only three percent of what it was in 1977.[23] Fringe benefits, substantially higher for more senior persons, provided a partial but inadequate compensation for this deterioration. Among the predictable consequences has been brain drain, moonlighting, corruption, demoralization, and inefficiency—which in turn have provided a rationale for continued or increasing use of expatriate technical assistants to fill skill gaps and make things work.

These expatriates must be paid at wages based on international demand and supply conditions, which may be 50 to 100 times the levels received by civil servants carrying out similar functions. But since they are mostly paid for by grants (or long-term loans with a substantial grant element) the costs to the local agencies being offered such technical assistance are low. Indeed, they may be lower than the cost of hiring a local person from the private sector with the same skills.

The results are three-fold. First, expatriates are often hired to serve operating, as well as advisory and training, functions even when locals with comparable skills are available. There is often a variety of non-economic reasons for this preference, including donors' interest in having one of 'their' people in the field to serve liaison, monitoring and compliance functions, and governments accept them because of their desire for other parts of the package containing the technical assistance, for example, equipment and fellowships. But such issues would play much smaller roles if the costs of the expatriates to the recipient agency were more in line with actual costs.[24] Second, trained Africans have a massive stimulus to move into the international market, and they are doing so in large numbers. In Kenya, some government offices have found it necessary to send 3–4 persons abroad for training to ensure that one will return. In Ghana, there are said to be more Ghanaian doctors working overseas than there are at home. And third, as a consequence, dependence on human capital from abroad remains high despite efforts made to educate and train.

## Conclusions

Carl Eicher[25] has recently summarized much of this picture by arguing that many of Africa's economic failures were a result of opting for "growth" rather than "development," that is, "strategies that emphasized capital accumulation, industrialization and a heavy reliance on foreign aid" rather than education, opportunities to gain experience in the market place, and institutional development. "In retrospect, the swarm of foreign economic advisors that descended on Africa in the 1960s was excessively preoccupied with a Marshall Plan menu for Africa: capital and technology transfers leavened with a generous supply of technical assistance." But Africa was not Europe at the end of World War II; it did not have the infrastructure, the skills, the experience, or the political stability to utilize massive aid flows effectively.

What role did the Bank play in this process? To the extent it played a conscious and deliberate role, it was in the fields of education, technical assistance and training, the central focus of this study. Its influence on the broader issues discussed in this chapter has been less direct, and much less conscious and deliberate. A major thesis of this study is that these broader issues will have to be more deliberately and systematically taken into account if the human resource problems of Africa are to be resolved in a reasonable period of time—a theme taken up again in the concluding chapter.

## Endnotes

1. Quoted in Jones, 1992, p. 34.
2. The terms World Bank and Bank are used interchangeably

and meant to include IBRD and IDA. Whenever the term Africa is used, it is meant to refer only to the countries of Sub-Saharan Africa (SSA).

3. More accurately, a sample of 29 African countries is compared to a sample of 83 developing countries that includes the 29 African countries. If the set of developing countries had excluded the African countries, the differences between the two sets of countries shown in Table 1 would be even larger.

4. These tables are taken from a recent paper by Barro and Lee (1993), which provides estimates for 129 countries over five-year periods from 1960 to 1985. It is probably the best source of such data allowing comparisons across countries and over time that is currently available. Barro and Lee started with census survey figures on educational attainment and used (among other things) school enrollment ratios applied to a perpetual inventory model to estimate stocks for non-census years.

5. World Bank, 1981, p. 9.

6. A 1989 World Bank report (p. 181) uses a figure of 100,000. Elliot Berg, in a 1992 manuscript on technical assistance, notes that extrapolation from recent reports of major recipient and donor countries results in a figure closer to 40,000. These reports, incidentally, indicate that there has been a decline in the number of expatriates during the decade of the 1980s.

7. Stewart et al., 1992.

8. See Chapters 1, 7, and 9 of Stewart et al., 1992.

9. The gross enrollment ratio is a ratio of the number of children attending a given level of schooling as a percent of the total in the relevant age group. This provides a good indication of capacity, that is, the number of places available for the relevant age group. But since many places in Africa are filled by students who are outside the relevant age group, this ratio is often significantly higher than the net enrollment ratio, which includes only children within the relevant age group who are attending school. Accurate figures on the latter are difficult to obtain, however.

10. See Lockheed et al., 1991, pp. 12-16, for a review of primary scores and references given therein for similar information at the secondary level. This source gives several telling examples of failures to achieve reasonable standards, for example, ability to comprehend simple written materials in the local language after three or four years of schooling, by a third to a half of all children to whom the examination was administered. Performance is poorest for tasks that require students to apply knowledge to new problems. For example, 26 percent of sixth graders in one Francophone country and 44 percent in another were able to answer the following question correctly: "If a package of 4 costs 3.8 francs, what would a package of 8 cost?" even though the answers were given in multiple choice form. This compares to 78 percent (which should also be a worrisome finding) of sixth graders in France who answered this question correctly.

11. From an assessment of higher education quality in East Africa by Kilemi Mwiria, quoted in Saint (1992), p. 12.

12. Op. cit.

13. World Bank, 1981, p. 132.

14. World Bank, 1993a, p. 46.

15. World Bank, 1988, p. 147 and 1989, p. 27.

16. See differences between the "total" and the "complete" columns of Table 1.

17. See, for example, Cornia et al., 1988.

18. Most of the literature suggesting that there has been a negative effect on education expenditure is based on the experience of Latin America and Asia. However, see Helleiner, Chapter 2 in Stewart et al., 1992.

19. OED, 1992 internal report, "World Bank Structural and Sectoral Adjustment Operations: The Second OED Overview."

20. However, neither study considered what might have happened to education expenditures in the absence of structural adjustment programs (and the financing that they brought into the country), or whether the education sector fared better in cases where the structural adjustment loan included conditions designed to protect the sector.

21. For example, the desire to rapidly expand and improve equity of access, focus on basic needs, and unify and nationalize the curriculum.

22. A good description of the market for technical assistants can be found in Berg, 1993.

23. Examples from Klitgaard, 1991, pp. 94-96.

24. This point is elaborated in an excellent discussion of the peculiarities of the market for TA personnel in Berg (1993).

25. In Stewart et al., 1992.

# 2. History of Bank Involvement in Education in Africa

This and the next chapter focus on the Bank's role in the education sector of Africa. This chapter reviews the history of the Bank's policy and lending to this sector while the next focuses on a number of key issues. Their principal conclusion is that, while the Bank's contribution has been substantial, several features of its efforts have limited their overall impact.

## The Initial Years: 1963–68

From its beginning, the World Bank stressed bankable investments involving the creation of physical capital. In 1962, the President of the Bank announced a new departure: "the Bank and IDA should be prepared to consider financing a part of the capital requirements of priority education projects...in the fields of (a) vocational and technical education and training...and (b) general secondary education..." While it was recognized that educational expenditures serve social and cultural, as well as economic, objectives, "only economic factors should be taken into consideration" in Bank funding decisions. Subsequent lending guidelines spelled this out in more detail. As with other loans for developing regions, funds would be provided only for discrete, free-standing investment projects and, as a general rule, only to cover their foreign exchange and capital costs. The terms technical and vocational were understood to include industrial, commercial, and agricultural skills, as well as teacher training, but not medical education since the Bank did not at that time lend in the health field. Primary education was also excluded "since there are relatively few countries where it can be considered a 'crucial gap' and since its impact on economic growth, although recognized, is indirect and deferred. In the field of university level technical education the Bank indicated a preference for assisting institutions of a purely or predominantly technical character rather than supporting technical faculties or departments within general universities."[1] Bank lending for education throughout the 1960s was based on this technical and bricks-and-mortar orientation.

Two factors explain the timing and nature of these decisions. The first was the awareness—which had been growing since the early 1950s—of the deficiencies in borrowers' technical capacities as evidenced in IBRD project preparation and supervision work and in reports on the severity of the human resource shortages, particularly in Sub-Saharan Africa (see, for example, President Black's statement quoted on page 26).

The second factor involved concerns about the Bank's credit rating. This concern ruled out education lending before 1960 when the Bank was totally dependent on international financial markets (at that time mainly Wall Street), but it persisted after the establishment of IDA and continued to be the most important factor determining what the Bank did in this field for many years. During this initial phase when the program was being established, it meant that the Bank felt more comfortable starting small, making loans to develop skills that would improve the productivity of other Bank investments, and providing funds for buildings and equipment rather than "software." Concerns about credit rating also affected the Bank's style of operations, for example, a tendency to exude confidence and certainty in the correctness of what it was doing, whether that was in fact the case or not.[2]

Given the Bank's inexperience in this field and the existence of a well-respected educational planning unit in UNESCO, an agreement was established between the two institutions to share the work in this new program. UNESCO would undertake sector investigations, identify and prepare projects, and provide technical assistance to help countries with implementation; the Bank would handle appraisal and supervision, and above all provide financing. Because of this division of labor and the high construction content in these projects, the major specialty among Bank staff during this period was architecture. The arrangement worked well during the first years. But the Bank's project focus clashed with UNESCO's broader social and sectoral approach—sometimes creating annoyance on the part of Bank staff about the slowness of project preparation work and on the part of UNESCO staff about the narrowness of the Bank's approach and its eagerness to plunge ahead without adequate understanding of the problem.[3] Over time the Bank built up its education staff and began itself to provide more project preparation assistance to borrowers. The agreement was eventually terminated in 1989.

OED evaluations of completed projects from this period indicate that substantial expansion took place in the narrow areas the Bank was willing to fund. But they also point to three tendencies that caused significant problems.

First, Bank staff had a tendency to assert that what the Bank was willing to fund was what was appropriate for all its clients. It was natural, up to a point, for project officers to do this. But this tendency was reinforced by the central location and small size of the education staff during this period, which made it difficult to specialize geographically. The result was a fairly narrow global strategy to which all countries were encouraged to adhere.

The approach proved especially harmful for Africa. The general strategy was not appropriate—or at least not adequate—for most of its African clients,[4] and the governments involved did not have the capacity to effectively argue back or compensate by using other funds to create a more balanced investment program, as did some countries in other parts of the world.

Second, as PCRs and PARs for this period testify, the Bank tended to remain aloof from practical involvement with qualitative issues. In SARs, these issues were introduced into covenants or letters of agreement, but without practical plans for their implementation. Moreover, during supervision, they were commonly ignored because of the Bank's lack of expertise on these issues, its focus on construction and equipment issues, and its concern with the procurement process. This is not to say that the Bank did not recognize the importance of issues such as educational planning and management, but rather that, given the size and composition of its staff and the agreement with UNESCO, it "appeared more content to offer detached criticism" than to become involved in practical details.[5]

Third, there were tendencies to fund projects too soon in the project cycle, before basic goal-setting and implementation planning had been done, to design overly complex and ambitious projects, and to exaggerate what they could accomplish, with inevitable disillusionment setting in later. Lending pressure accounts for part of this problem; but the paucity of education specialists within the Bank was also important. Had seasoned educators played a more telling role within the Bank, they might have been more effective than the UNESCO staff sitting far removed from Washington in persuading Bank management to expect less and allow more time for the establishment of basic conditions for effective lending.

## The McNamara Years: 1968–81

During the 1970s, the Bank diversified its sources of funding (IDA played an increasingly important role, and an increasing portion of its borrowing took place in non-U.S. financial markets), grew rapidly in size, devoted significantly more resources to research and policy analysis, and became something more of a development institution. Instead of working within the constraints of conventional views about fiscal soundness, Mr. McNamara began to influence these views. A milestone on this path was his 1973 address to the Board in which he proposed that the Bank focus on poverty alleviation by redirecting productive investments (rather than outputs or assets) in such a way as to meet the basic needs of the poor, needs defined to include primary education and literacy.

This address added substantial weight to the pressures that had been building up since the late 1960s to broaden education lending criteria. Some easing had already occurred,[6] but this initiative ensured that primary education would be the principal beneficiary. In principle, lending for primary and nonformal education was to be added without cutting back on lending for secondary and higher education. In fact, however, lending (in constant dollars) for the education sector as a whole reached a peak in 1972–73 and declined thereafter (see Figure 3 and Annex Table 5), so the absolute amounts committed to secondary and tertiary education, as well as their percents of total, declined. All the arguments against funding primary that had been made prior to this time dropped from sight. Support for secondary was weakened by growing disenchantment with diversification; and support for higher education, never very strong, was further eroded by the view that it benefitted a small elite, the opposite of what a poverty focus implied. The argument that universities were needed to provide managers and specialists, plus research and policy analysis, for the new areas of investment was not seriously considered at the time.[7]

These shifts in policy are reflected in sector and policy papers issued by the Bank's Education Department. The 1971 *Education Sector Working Paper* continued the focus on vocational and diversified secondary but noted that the Bank was also interested in finding ways to make more use of educational broadcasting and improve the internal efficiency of primary education. The 1974 *Education Sector Working Paper* argued for expansion of primary education in rural areas as part of the poverty focus, and if necessary, at the expense of secondary and tertiary. The 1980 *Education Sector Policy Paper* reverted to a more balanced perspective, arguing in effect that the Bank would support whatever made sense for economic development. While retaining emphasis on basic education in low income countries, it pointed out the importance of higher education and institutional capacities for management, planning, and research if optimal value was to be derived from the education system.

These shifts are also reflected in the allocation of funds in Bank funded education projects. As Figure 5 indicates, the percent of project funds spent on primary education and on nonformal education (part of unallocated) increased at the expense of secondary during most of the period and at the expense of teacher training during the last few years.

One can also observe some shifts in focus from expansion to addressing qualitative and structural issues. The proportion spent on software increased (providing textbooks, teaching materials, and technical assistance to assist with such things as curriculum development and improvements in teaching and examinations), while the proportion spent on hardware decreased (see Figure 6). Within the hardware category, less was spent on expansion (civil works) and more on the provision of laboratories and workshops.

This shift towards qualitative issues was confined almost exclusively to individual projects. Rarely during this period did the Bank become concerned with system-wide reforms or efforts to strengthen ministries of education. One sign of this was the extensive use of special project implementation units rather than normal line agencies for implementation. The Bank did provide support for nascent institutes of education in Kenya and Sierra Leone and to enhance educational planning capacity in Ethiopia,[8] but these are exceptions.

During this period, covenants became more detailed, policy relevant, and invasive. In the end, according to the PCRs for these projects, they seldom accomplished much; and by the end of the period, their continued use was being questioned.

Education projects took considerably longer to prepare than did projects in other sectors. The fundamental reason for this is that, in this sector, there are no blueprints that can be relied upon, many more sensitive political decisions are required before a government can agree on a proposal, and the environment is less stable and predictable (requiring more changes during any protracted period of preparation or implementation). In addition, OED's 1978 "Review of Bank Operations in the Education Sector" (prepared for internal use) concluded that longer preparation periods resulted from lack of background studies and sector plans, lack of agreement and understanding between the Bank and the government, and a tendency on the part of the Bank to introduce new, previously undiscussed, factors at different stages in the process. Efforts to speed up the process usually turned out badly because they often resulted in additional, seemingly arbitrary decisions on the part of the Bank that were resisted by the borrowers. The 1978 review also noted substantial time delays in implementation.

These and other problems identified by this review resulted in its concluding that the Bank had devoted insufficient attention to effective borrower participation in project identification and preparation, and to development of borrower capacity to plan, manage, and undertake research on the development of their education systems. It is disturbing to note how long ago these points, which constitute today's conventional wisdom, were made in a major Bank document.

There is one administrative change that occurred during this period that had considerable significance for the Bank's education work. A reorganization in 1972 transferred responsibility for projects from the center to the regions. This seriously weakened the influence of the central staff over policy approaches in projects, facilitated adaptation to local circumstances, and created the possibility of a divergence between global guidelines and what was actually funded.

## Years of Economic Deterioration and Adjustment: 1981–87

The 1980s was a period of economic deterioration in Africa, a consequence of the severe internal mismanagement and external imbalances that had been building up since the late 1970s. Nearly everything that occurred in the Bank's education sector during this period was a reaction to these macroeconomic events. They resulted in a slowdown of education lending. They encouraged the development of Africa-specific education policies and programs. They accelerated the trend towards broadening the narrowly economic justification for education lending. And they led to the use of new lending instruments with, if anything, more intrusive conditions.

During the early part of this period, two features of Bank policy resulted in increased pressure on Africa's already weakened education systems. The first was a decision to concentrate lending on quick-disbursing structural adjustment loans and on more directly productive sectors for what was thought to be a brief emergency period. This resulted in a reduction in annual education lending by the Bank from $0.50 per person (in 1990 dollars) during the period 1972–81 to $0.32 per person during the 1982–88 period (see Annex Table 4). The second was the policy thrust of early structural adjustment loans which encouraged governments to reduce public expenditures by using "nonsector specific" reforms—for example, caps on civil service wages and employment levels—which had the effect of hurting labor-intensive sectors like education more than others. Increasing evidence of the negative effects of these actions, plus external pressures on the Bank and the IMF to protect the social sectors during this period,[9] resulted in a return to earlier lending levels during the 1989–92 period and the introduction of conditions designed to provide some protection either in SALs or in education sector loans provided in parallel with the SALs.

Bank staff responsible for education tried to cope with this situation in two ways, first by encouraging African governments to improve the financial efficiency of their education systems and by encouraging donors to support these efforts, and second, through adjustment in its own operations. The first line of attack was assisted by the increased attention the Bank gave to Africa during the 1980s. This resulted in greatly increasing the number of staff working on Africa and the number of studies and policy papers devoted specifically to Africa. Among these, the 1981, 1984, and 1989 Bank reports on the economic problems of the region as a whole are the most prominent. Human resource shortages and the importance of education featured heavily in all of them. In education, these pressures resulted in the Bank's first (and so far only) region-specific education policy paper, *Education in Sub-Saharan Africa: Policies for Adjustment, Revitalization, and Expansion*, published in 1988.

This policy paper is noteworthy in several respects. First, contrary to most previous reviews of this sort, the material was developed in a collaborative style: while the first draft was prepared within the Bank, subsequent drafts were influenced by meetings with African educators and donors. Second, the paper called for development of individual country plans as the basis for donor assistance, rather than laying out a blueprint for general application. These two factors helped considerably in its ultimate acceptance by the African donor and borrower communities and resulted in the establishment of the Consortium of Donors to African Education, an organization that is helping to mobilize international financial support for country plans and programs.

The paper did, however, note that there were also common needs and problems that justified general recommendations in three areas: adjustment, revitalization, and expansion. On *adjustment*, so as to cope with the economic crisis, all countries had to diversify their sources of sector financing (increase user charges and encourage private schools) and to contain unit costs (through such measures as reducing "pedagogically redundant civil works"—

boarding, auditoria, cafeterias and sports complexes, promoting more intensive use of existing facilities, reducing "ghost" teachers, reducing teaching salary levels, in part by hiring less qualified staff). On *revitalization*, with a view to restoring quality, the paper emphasized use of school examinations, supply of learning materials and textbooks and proper maintenance of buildings and equipment. On *expansion*, subject to progress on adjustment and revitalization, the paper proposed concentration on four areas: renewed progress towards the long-term goal of universal primary education, greater use of distance education to expand access at the secondary and tertiary levels, provision of training for those who have already entered the labor force, and expansion of Africa's capacity to produce its own intellectual leaders through, among other things, regional approaches to expanding research and postgraduate education.

Within operations, Bank staff attempted to cope with Africa's deteriorating economic and political situation in two ways: first, by interpreting the limitations on recurrent cost funding more liberally, and second, by encouraging the introduction of user charges, reductions in subsidies, privatization, shifts of public funds from higher to primary education, and general improvements in internal efficiency—in effect trying to ensure that the cutbacks in educational expenditures would be undertaken in an orderly fashion. Along with investment loans, an increasing number of sector adjustment loans, believed to be more appropriate for attacking policy issues associated with the sector as a whole, were utilized.

Some increase in recurrent cost funding has occurred (see discussion of primary education below). But Bank efforts to shift a greater burden of the costs onto parents, teachers, and local communities have so far met with little success. When applied at the primary level, such efforts have often resulted in reductions in enrollment rates and greater disparities (in school quality and enrollment rates) between richer and poorer communities. When applied at the university level, they have run into organized and effective opposition, from students, teachers, and parents, that has sometimes forced governments to renege on their agreements with the Bank. A recent review of ten sector operations that tried to introduce greater cost recovery at higher levels and redistribute the savings to lower levels found that redistribution in the desired direction occurred in only three cases.[10]

## Recent Operations: 1988–92

This section is based on a review of recent Africa-specific policy and sector work plus a sample of 19 (out of about 40) lending operations approved during the 1988–92 period. Its purpose is to determine whether lessons from experience with completed operations are being taken into account and to ensure that the conclusions of this study have not been overtaken by events. On the basis of this review, the following generalizations about activities during this period seem warranted.

Since the 1987 Bank reorganization, which encouraged a greater country focus, and the 1988 policy paper, *Education in Sub-Saharan Africa*, the number of Africa-specific analyses has increased.[11] They are generally of good quality and, provided they do not become insular, should have an increasingly positive influence on the Bank's strategies and operations in Africa.[12] These products, however, are mostly limited to assessments of the impacts of specific interventions and of the problems and needs of individual subsectors. They seldom attempt to link and integrate educational and national development plans; it almost seems, at times, that they run on parallel, but independent, tracks.[13] Unless they are deliberately linked so that the education sector has a clear, strategic role to play in national development, the sector is unlikely to obtain the resources it needs to make a significant contribution, particularly during times of economic austerity.[14]

While this decentralization of policy and sector work represents real progress, there are still some tendencies to make across-the-board recommendations without adequate country-specific justification. A case in point is the near universal recommendation to reallocate within the education budget from higher to primary education and the strong tendency (in 13 of the 19 projects reviewed) to recommend increased user charges. Such recommendations are unlikely always to be correct.[15]

Some 17 of the 19 projects reviewed are concerned predominantly with primary education, occasionally with quantitative expansion, but always with qualitative improvements. The latter are to be achieved through a package of inputs that included, among other things, curriculum reform, provision of textbooks, school supervision, and teacher training, usually in-service.

The Bank provided little support for secondary education expansion, even in countries like Burundi, Malawi, and Tanzania where secondary school enrollments are among the lowest in the world. In contrast with earlier periods, investments in vocational/technical education were also limited. At the same time, however, these investments placed greater emphasis on liaison with the labor market and shorter, more flexible training programs. Support for higher education, which reached a low in the 1980–87 period, recovered somewhat during this period, but remained predominantly concerned with improving internal efficiency and with cost recovery. As in the earlier period, the most frequently used justification for this allocation was that support for these sectors increases inequities. This argument needs to be used with more care; it certainly requires more thoughtful consideration than it typically has been given.[16]

The number of policy issues addressed through covenants in loan agreements has continued to increase. Many of these commitments make good sense. But they are to a large extent Bank-imposed and are likely to contribute to draining away a sense of ownership. As in past years, there is often insufficient attention to achieving consensus and developing implementation plans.[17]

By comparison with earlier periods, considerably more attention was paid to management and institutional development. There is, however, still a tendency to focus on aspects most pertinent for project implementation rather than on the ministry, to insert these elements without working out an implementation plan in advance, and to devote insufficient attention to the role of NGOs.

A striking feature of both sector work and SARs is the lack of justification for the appropriate share that education should be of the national budget and that various subsectors should be within the education budget. The absence of such norms has resulted in the Bank taking very different positions in different countries and at different times. Sometimes, for example, it has taken education's share of the overall budget as given despite the fact that it was very low or high by global standards; other times it has recommended an increase in one country and a decrease in another despite the fact that both were at about the same level. While such differences can be explained by differences in many other variables—government's share of GDP or relative prices, to mention only two—the documents seldom provide such explanations. This lack of explanation at times makes the Bank appear arbitrary and insensitive to local conditions. It also hinders efforts at persuasion in situations where change is urgent and fully warranted.

A few projects include promising innovations that should be highlighted. The effort in Mali to assist university graduates find employment in the private sector or begin their own business (among other ways by providing a small start-up fund) is the kind of support long overdue in SSA. School libraries in Tanzania and public libraries in Nigeria to encourage reading were areas previously neglected in Bank operations. A project in Ghana provides support for adult literacy, after a hiatus in lending for this purpose in Africa of ten years. Radio was financed to support distance education programs in Malawi. Education testing and examinations were included in projects in Burkina Faso, Côte d'Ivoire, Gambia, Malawi, and Somalia indicating a growing appreciation of the areas of support needed in improving education.

## Bank Resources and Their Allocation

Reflections of this evolution of Bank education policy can be seen in the way the Bank allocated its financial resources to education and its various subsectors in Africa compared to other sectors, regions, and donors. Those allocations are the topic of this section.

During the period FY63–92, the Bank committed $2.8 billion to education in Africa. This represents approximately 7 percent of its total commitments to Africa, a larger share than it devoted to education globally (5 percent) but a smaller share than provided by other donors: during the 1980s, OECD bilateral donors allocated approximately 11 percent of their Africa portfolio to education, with other UN agencies contributing 30 percent. In the 1981–83 period, Africa received about $2 per capita in external assistance for education (about twice that received by other regions); of this amount the Bank contributed 17 percent, making it the second largest donor next to France which contributed 26 percent. Since then, the Bank's share has increased and in 1990 reached nearly 22 percent.[18]

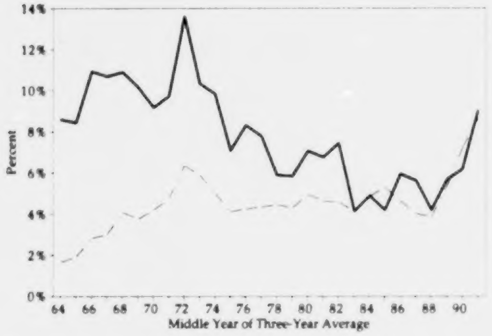
While the quantitative importance of the Bank's contribution to Africa varies considerably across countries and is difficult to estimate accurately, a rough indication is provided by the figures in the last two columns of Annex Table 3. They suggest that, over the period 1975–90, the Bank's contribution (measured by disbursement estimates) as a percent of total public expenditures (net of external assistance) averaged approximately 16 percent, a substantially larger figure than found for most non-African borrowers.

Over time, this preferred treatment has declined, as the three panels of Figure 3 indicate. Between 1968 and 1988, education as a percent of total lending declined from approximately 10 to 5 percent in Africa, while it remained relatively constant at about 5 percent for the world as a whole. Since 1988, the figure has risen in tandem with the world figure. The panel comparing per capita commitments presents a similar picture: a decline in Africa since the peak of over $0.60 in the early 1970s to a low of about $0.25 in the mid 1980s, while the global figure has remained roughly constant at around $0.25, and an increase everywhere (in this case somewhat more for Africa) since 1988. The third panel presents the same material in terms of expenditures per country.

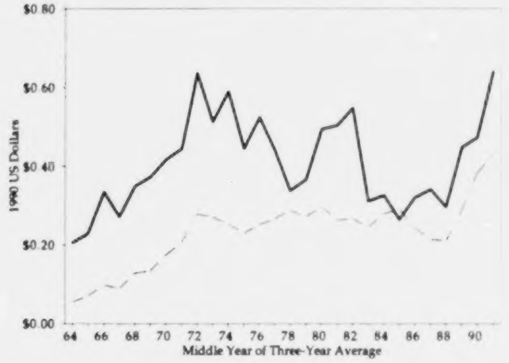
Given the Bank's poverty focus, one might expect to find that the Bank allocated its commitments within Africa to the neediest countries—those with the lowest per capita incomes and enrollment rates. The fact that other donors provide more assistance (per capita) to smaller countries—which in the African case tends to mean richer countries—adds to this expectation.[19] But as Figure 4 indicates, this is not the case. At one time or another, the Bank has funded education projects in every country in SSA,[20] in some as many as five or six times; but there is no correlation at all between per capita commitments to education and per capita incomes.[21] This suggests that other factors

FIGURE 3: TRENDS IN BANK LENDING FOR EDUCATION, AFRICA AND WORLD

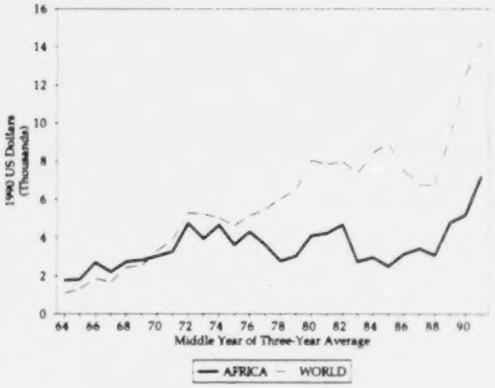
A. PERCENT OF TOTAL LENDING



B. PER CAPITA LENDING



C. PER COUNTRY LENDING



uncorrelated with incomes such as absorptive capacity, interest on the part of the government, and the state of relations between the Bank and the country, have overridden the Bank's poverty focus when it comes to decisions to lend to education.

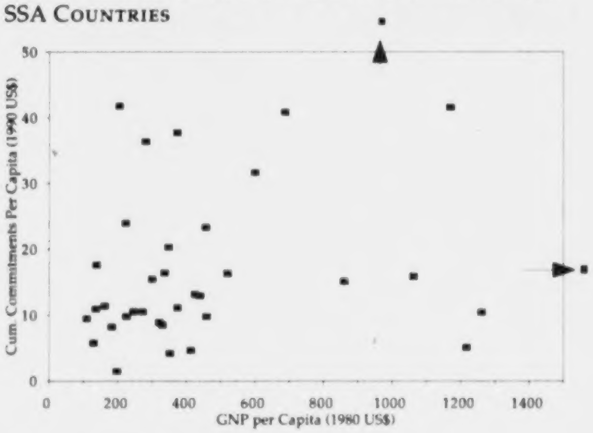
Allocations by level of education have been more clearly related to Bank policy. The first panel of Figure 5 shows the early dominance of lending for secondary, the rising importance of primary, a temporary, modest, increase in focus on nonformal, and the limited allocation to tertiary. As the second panel indicates, the overall character of the Bank's allocations to all countries is similar, but with an important exception for higher education which played a much bigger role—and an increasing role over time—outside of Africa.

Allocations by curriculum largely follow from the allocations by level of education. The downward trend in financing general and diversified education until the mid-1970s, shown in the second panel of Figure 5,[22] is attributable mainly to the decrease in financing secondary education, while the later increase in the share of general (and diversified) education can be explained by increased support for primary education. Similarly, the growth in lending for rural development and agricultural training in the 1970s coincides with the Bank's greatest lending activity in the field of nonformal education and expansion of activities at the primary level. It is interesting to note that the share allocated to teacher training has been relatively constant over time despite the recent emphasis on qualitative improvements at all levels. Still, the Bank has devoted a larger share to teacher training in Africa than it has in other regions.

Bank financing as a share of total project costs in education has increased from 60 percent in the late 1960s to 67 percent in the mid-1980s—this at a time when the percentage was falling in other parts of the world, from 48 to 30 percent. The increasing percentage in Africa is understandable given the economic problems of the late 1970s and 1980s, but raises concerns about project ownership and sustainability after completion. Cofinancing has increased from negligible amounts prior to 1975 to 8 percent of total project cost during the second half of the 1980s.[23]

Allocations by expenditure categories (Figure 6) reflect other features of Bank policy shifts. During the late 1960s, more than 95 percent of total project costs in Bank-supported education projects in Africa were spent on hardware—85 percent for civil works and the remainder for furniture and equipment. Since then, the shares devoted to hardware have declined. This decline appears quite substantial when viewed from appraisal documents. But a disproportionate share of physical and price contingencies is typically allocated to hardware components—mainly to civil works—during implementation. Furthermore, Bank files reveal numerous instances of reallocations away from other categories, especially technical assistance, towards civil works. This has usually been condoned because delays in construction, coupled with price increases, have raised the cost of civil works, while the availability of TA on a grant basis from bilateral donors plus the feeling that not all proposed TA was necessary have made several African governments reluctant to spend funds allocated for such assistance. The result has been a more modest decline in the proportion of actual expenditures on civil works—85 to 55 percent of total project costs and from 65 to 45 percent of Bank funds over a five-year period centered on 1966 to a similar period centered on 1981.[24] Since then, appraisal estimates have continued to decline, reaching about 20 percent in 1992. As the percent spent on civil works has declined, all other categories—furniture and equipment, technical assistance, and operating costs—have increased. Compared to other regions, African education projects contain larger shares for civil works and technical assistance and smaller shares for furniture, equipment, and operating costs (see Table A1.6, OED, 1992).

FIGURE 4: PER CAPITA CUMULATIVE COMMITMENTS FOR EDUCATION PROJECTS AND GNP PER CAPITA FOR SSA COUNTRIES



*Source:* World Bank, World Tables and internal documents.
*Notes:* Population and GNP per capita for the year 1980 were used. Other formulations were tried, but make little difference.

## Conclusions

Of the various ways that the Bank might promote and support HRD in Africa, its work in the education sector is the most advanced and elaborated. Starting very tentatively and narrowly, it has evolved—albeit with some unfortunate zigs and zags—into what is now a fairly complex operation. There are a number of dimensions to this evolution:

- from the application of a global policy to the elaboration of region-specific, and increasingly, country-specific, policies;
- from providing one critical input—mainly civil works—to providing more and more of the whole package of inputs required to make a project work, including increased financing of operating inputs;

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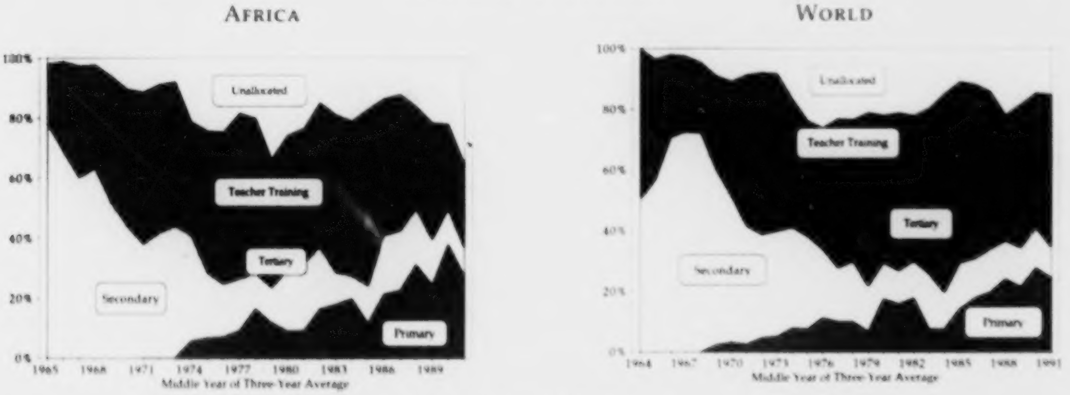
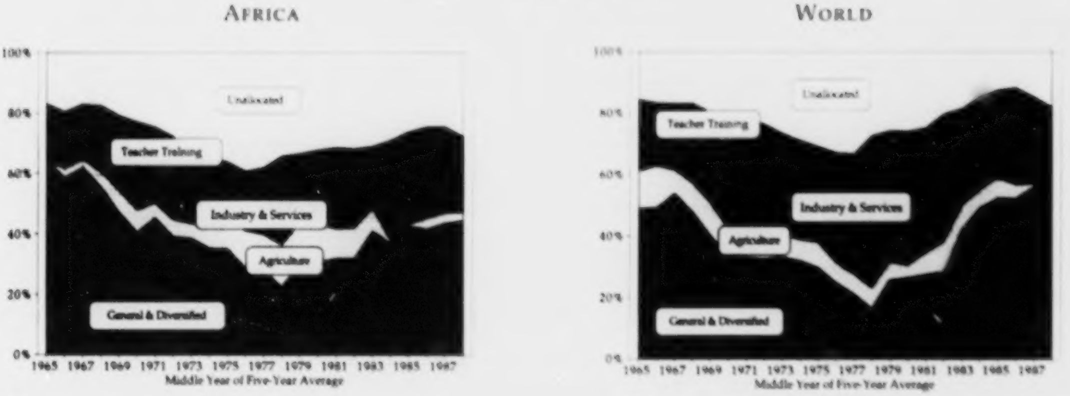
**FIGURE 5: ALLOCATION OF EXPENDITURES IN BANK-FUNDED EDUCATION PROJECTS**

A. BY LEVEL OF EDUCATION



B. BY TYPE OF EDUCATION



*Source:* Table A1.9, OED, 1992.

- from a focus on expansion of the system to an increasing focus on improvements in the system; and

- from little involvement in policy issues (other than what was necessary for a given project) to considerable involvement, including not only sectorwide but nonsector issues when important for sector operations.

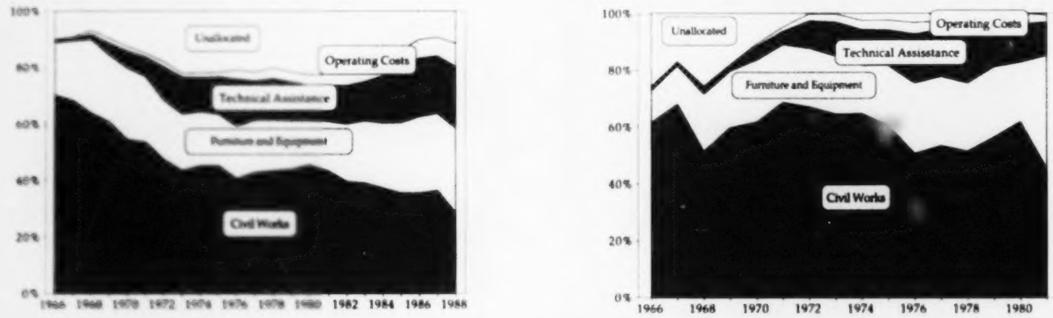
Of course, over this period, the Bank in general was evolving from a traditional banker to a development institution. But this evolution seems to have proceeded farther and more intrusively in Africa than elsewhere, probably for two reasons: first, because of increasing concerns about lack of progress, and second, because African governments seem to have accepted such involvement to a greater extent than have many governments elsewhere in the world.

The positive side of this evolution is the heightened effort made to ensure that the whole pack-

Figure 6: Appraisal and Actual Distribution of Education Project Costs, Bank and Total

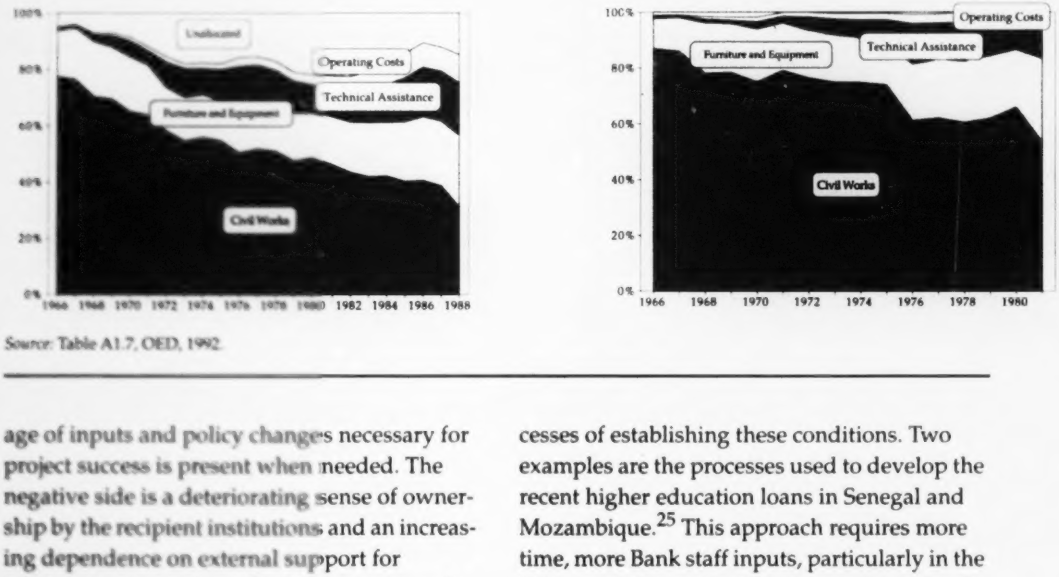
Appraisal Distribution of Bank Financing in African Education Projects

Actual Distribution of Bank Financing In African Education Projects



Appraisal Distribution of Total African Education Project Costs

Actual Distribution of Total African Education Project Costs



Source: Table A1.7, OED, 1992.

age of inputs and policy changes necessary for project success is present when needed. The negative side is a deteriorating sense of ownership by the recipient institutions and an increasing dependence on external support for whatever progress is made. It is not a formula for achieving lasting improvements in local capacity.

One way to cope with these negative consequences is to back off a bit, waiting longer to lend, especially for system expansion, until more of the conditions necessary for a successful operation are in place, but at the same time encouraging and facilitating recipients' processes of establishing these conditions. Two examples are the processes used to develop the recent higher education loans in Senegal and Mozambique.[25] This approach requires more time, more Bank staff inputs, particularly in the field, good donor coordination, and a style of operations on the part of Bank staff that is closer to that of a facilitator or catalyst than a prime mover.

Another is to scale projects down to the size and complexity that can be designed and implemented with existing capacity. While this approach has been recommended numerous times over the last few years, the study found

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no evidence that general practice has changed in this regard.

Yet another approach is to devote less time to the elaboration of substantive interventions and more to the development of mechanisms to accomplish the same things more indirectly, and, hopefully, more effectively. One mechanism that has been used successfully is the establishment of a fund to which individual institutions can apply on a competitive basis to finance activities that meet certain criteria. To mobilize the best efforts possible, any institution should be allowed to apply, private as well as public, new as well as long-established. In Korea, loan funds for private hospital expansion have been allocated this way. Social investment funds such as those operating in Bolivia and Guinea-Bissau operate in a related manner[26] (although Guinea's fund has been very slow to disburse). The Nigeria universities adjustment loan established a mechanism that provides funds to individual universities meeting certain criteria, though the notion of competing for limited funds on the basis of reform proposals was not accepted.

Both approaches would require changes in established behavior patterns and attitudes on both the Bank's and the borrower's part, and might therefore be difficult to apply on a significant scale. But without some such changes, it is doubtful that significant improvements in local capacity will be possible in the near future.

## Endnotes

1. Quoted in Jones, 1992, pp. 56 and 75. The unwillingness to fund technical departments in universities resulted from concerns that the funds, directly or indirectly, would be diverted to benefit liberal arts and other programs in those institutions.

2. These decisions were not significantly affected by the then new writings on the economics of human capital. What these writings did was help the Bank overcome skepticism by providing a respectable, economic justification for its entry into this field. It did not, at least in these early days, help it decide what to invest in within the education field. Nor were these decisions based on the education planning methodology of the time, which advocated establishing an investment plan for the sector based on a comparison of overall educational needs with existing capacities. Invariably, the picture of needs emerging from such an exercise included some educational facilities of all types and levels. For African countries starting out with few institutions of any kind, this implied an investment plan that was far more balanced than what the Bank was willing to lend for.

3. A 1965 report to the Director of the Technical Operations Department about the cooperative agreement, quoted by Jones (p. 73) makes this clear: "There may be an organic flaw in the setup of the Program. It is becoming apparent that in almost all cases thus far the project identification missions have been premature. Such missions have been sent to countries where little basic planning has been done, where priorities are unclear, where statistical data are not assembled or analyzed, where educational policy needs review, where even general targets have not been set, etc. As a result the mission must act as a planning mission and is unable—for lack of time or because of circumstances—to actually identify projects. As a result missions take longer than they should, the reports have to be more voluminous, and they do not in fact accomplish their purpose."

4. The policy was based on a variety of implicit assumptions: that there was a pool of good primary school graduates with the appropriate background for and interest in a vocational or technical education, that adequate numbers of teachers with the requisite technical and scientific backgrounds could be found or quickly trained, that social pressures for the expansion of primary and tertiary education could be contained, that management and implementation capacity was adequate and did not have to be built up first before any investment strategy could succeed, and so on. Additional implicit assumptions were necessary to justify the Bank's insistence on introducing a 'diversified' curriculum at secondary level, among others, that such a curriculum would in fact make graduates more employable and immediately productive, that this curriculum could be added without reducing effective time spent on basic skills like literacy and numeracy, and that secondary education was the terminal education for the vast majority of students.

Few of these conditions held in Africa. Consider, for example, the last of these conditions. For most of the 1960s, an African with a secondary degree was in a small elite group and could realistically expect to proceed to the university or obtain a white collar job—not the sort of job which the framers of the diversified curriculum had in mind. The vast majority of students terminated their education and entered the labor force upon or before completing the primary cycle. It is that group who might have been helped by a more practical curriculum.

5. Jones, p. 84.

6. In a 1970 presentation to the Board, McNamara argued that in applying the 1963 guidelines, "we should...select projects on the basis of a thorough examination of the education system as a whole rather than by a priori designated areas of eligibility which may not relate to the particular country." (Quoted in Jones, p.

103.) This opened the door to investments in nontechnical/vocational education, but initially was interpreted very modestly to include, for example, financing for experimental projects in primary education (though not for general expansion), science, technical, and professional fields in general universities, textbook supplies and local production, and technical assistance in support of innovations and institutional development.

7. The implicit assumption here is that most of the benefits of higher education institutions flow to its students. This notion ignores the nonteaching benefits of universities, the value of its research, policy analysis and advice, as well as other externalities. While it is true that these are areas where African universities have been particularly weak, an alternative policy would have been to focus attention on building up these crucial nonteaching functions so that these institutions could have played a useful role in poverty alleviation, as well as general development, efforts.

8. The Ethiopia case is especially noteworthy because of the central role played by the government in designing and undertaking comprehensive review of the education sector that emerged from this planning exercise.

9. A particularly influential treatise during this period was the book, *Adjustment with a Human Face*, (Cornia et al., 1988), which argued that in the process of scaling back government spending, the social sectors need to be protected.

10. The three cases were Ghana Education SECAL I and II and Malawi Education Sector II. The author concludes from these ten experiences that such efforts require more staff and time inputs than other operations, "extensive up-front and integrated macroeconomic, budget, and sector analyses," specific steps to achieve political consensus and local ownership, and, most important, the development of creative incentives for "losing" subsectors. See Stevenson, 1991, pp. iv, v, and 38.

11. They include reports from the "African Book Sector Studies," 1991, which discussed nine country cases; an exploration of the possibilities of *Using Examinations to Improve Education: A Study of Fourteen African Countries*; a paper exploring the shortage of science and technology capabilities in SSA and what to do about it; and a technical paper on *Universities in Africa: Strategies for Stabilization and Revitalization* (Saint, 1992); and a study of experiences with distance education in Anglophone Africa (Murphy and Zhiri, 1992).

12. A positive example of this decentralization within the Bank can be seen in the financing of public libraries under the Nigeria Primary Education Project, an innovative and commendable approach to encouraging literacy, which might not have survived the more global review process utilized before the 1987 reorganization—a process that helped stymie a somewhat similar effort in Indonesia in 1986. A possible cost of such decentralization can be a loss of cross-fertilization, but that can be avoided by rotating experienced staff between regions and countries. To make this happen, however, the tendency to use Africa as the point of entry for new staff needs to be avoided.

13. The SAR for the Zaire Rehabilitation Project states that the project objective is to stop the deterioration of primary education, start rehabilitating "the basic system of instruction," and help to restore the conditions for "long-term, balanced development of a more efficient sector" (para. 3.01), all worthy goals in any country but not geared to providing the specific human and institutional capacities required to lift this natural resource-rich but poor economy out of stagnation. Contrast this with the 1988 SAR for the Malaysia Second Primary and Secondary Education Sector Project that derives its goals from the skill requirements necessary to assist the national economic plan in moving the economy out of purely primary production.

14. The Bank's involvement with the education sector in Ghana has been something of an exception to this pattern. In this case, a comprehensive, integrated, education reform program was developed and, after an extensive period of internal discussion and political preparation, supported by the Bank through two education sector adjustment credits, the first of which was approved in 1987. The results so far have been quite good. While linkages with national development plans were not featured in these operations, subsequent projects have rounded out the package so that the whole seems reasonably well integrated with social and developmental needs.

15. In both Zaire and Tanzania, for example, the Bank recommended increasing the percent of primary and secondary costs borne by parents and local communities despite the fact that these parents were already contributing large shares (60 and 67 percent for primary and secondary in Zaire and 35 and 30 percent in Tanzania) and that evidence was accumulating that parents were withdrawing their children from school because of these costs. Evidence of withdrawal for cost reasons is also present in Mali and Nigeria. Given the findings of econometric studies indicating income elasticities of demand for schooling of 0.5 or greater, such evidence is to be expected wherever incomes have fallen to any appreciable extent.

16. The most frequently cited evidence of inequities is large differentials in unit costs between the three levels, typically larger in Africa than elsewhere. But these differentials are high not only because of differences in student subsidies but also because of differences in student-teacher ratios and teacher salaries, which arise from differences in educational goals, teacher qualifications, and labor market conditions, plus the relative absence of economies of scale at the tertiary level. The argument would be much stronger if it were shown that there is unequal *access* to higher education among different social and income groups; but this possibility is rarely investigated or discussed.

17. The Mali project and the Mauritania Third Education Project include so many detailed conditions that IDA appears more the "owner" of the project than does the government. On the other hand, the Uganda Fourth Project and the Malawi Second Sector credit include quite sensible conditions, although the former was launched in a difficult environment. The Chad Fourth Project seems to be a generally sound approach to rehabilitating a seriously weakened system without setting impossible goals.

18. Calculated from King and Carr-Hill, 1992.

19. Orivelle and Sergent, 1988.

20. The only exceptions is Seychelles.

21. Indeed, there is even some evidence that the Bank provided less funds for expansion of primary education in poorer countries because of their lesser ability to fund the recurrent costs of the expansion (see Chapter 3, *Financing Primary Education*).

22. This figure is based on a database that ended in 1989 because the newer database, which incorporates data up to 1992, does not provide this breakdown.

23. This is in contrast to much higher percentages of cofinancing in other parts of the world and in other sectors, for example, population. This issue has not been investigated but might reflect a lower level of cooperation between donors in this field in Africa.

24. The latest period for the initiation of projects that have closed in large enough numbers to make a meaningful sample.

25. In Mozambique, a strategic planning process was initiated by the University to build internal consensus and be able to act with a united front. Once agreement was reached internally, the University presented its proposal to government and donors at a consultative meeting where external consensus was sought. A second consultative meeting was held after 15 months to report progress. In Senegal, where strong, diverse interest groups had held up progress for some time, a senior person with the respect of most groups was hired to organize consultative meetings with various groups and draft a report recommending a solution. The Bank helped facilitate both processes prior to initiating project preparation.

26. While originally developed to mitigate the negative effects of structural adjustment, they embody many features necessary for HRD that are neglected by traditional education projects: encouraging private initiative, requiring applicants for funds to develop action plans that provide a basis for monitoring, providing beneficiaries not only with funds but with technical assistance and training, including specific plans for monitoring and evaluation, and community mobilization.

# 3. Selected Issues in African Education

This chapter provides a discussion of a limited set of issues. The criteria used to select these issues included relevance to the themes of this study, the currency of the issues, and the availability of OED general operational reviews of Bank activities and project results of particular relevance to Africa. This last point explains why, for example, vocational education and teacher training were not covered except in passing.

## Financing Primary Education

The Bank's early reluctance to lend for primary education was based on two notions: (a) that the limited amounts of funds available would be more usefully spent on other subsectors closer to final production of the skills thought to be in shortest supply—hence the focus on vocational and technical education at secondary and higher levels, diversified secondary, and primary teacher training; and (b) that political pressures for primary education would ensure that sufficient funds were directed towards this sector without Bank intervention. The shift in policy during the McNamara period resulted from his focus on basic needs (which included literacy) plus the assumption (in those days of expanding aid budgets) that the addition of primary education would not be at the expense of other subsectors.

Because of concerns about shortages of budget resources in poorer countries, the 1971 and 1974 *Education Sector Working Papers* stopped short of advocating universal primary education (UPE). Instead, they endorsed a "dual track" system, the second track being nonformal education for those unable to attend formal primary schools, and offered to provide funds for upgrading rather than expanding primary schools. The 1980 *Education Sector Policy Paper* dropped this notion in favor of UPE despite increasing financial difficulties in poor countries, arguing that cost-saving from improvements in internal efficiency would be sufficient to achieve UPE in most countries and that foreign assistance should be directed towards the poorest countries who could not do it on their own. The 1990 paper, *Primary Education*, continued to recommend movement towards UPE as fast as financing and other constraints would allow.

During the 1960s and 1970s the Bank lent for expansion of teacher training facilities, not directly for primary education (with a few small exceptions). Since 1980, 60 out of 85 projects have contained significant primary education components.

These loans included relatively little for construction. Since 1985, for example, 17 percent of project cost was allocated to civil works (compared to 56 percent in other countries), 35 percent to textbooks (4.5 percent elsewhere), and 11 percent to technical assistance (4 percent elsewhere), with the remainder scattered over a number of small items. A 1985 review[1] found that while Africa received 46 percent of the Bank-funded projects with primary components, these components involved only 17 percent of Bank investments in primary education and produced only 10 percent of the places attributed to these investments (compared to Africa's having 13 percent of the population and receiving 20 percent of all Bank funds for education). In contrast, Latin America, with its much higher income levels, received a disproportionately large number of the places funded by the Bank.[2,3]

The net effect was some expansion of primary systems, mostly into rural and underserved areas, substantial provision of textbooks, teacher training, and curriculum reform, including the introduction of practical subjects. While all this represented a significant positive contribution, Bank projects contributed little to achieving the goal of UPE.

Several factors explain this limited focus on construction. First, local communities were often responsible for providing or constructing the school building, and the Bank was reluctant to interfere with these arrangements. Second, Bank staff were concerned about the difficulties of continuing direct supervision of construction as the number of building sites increased. Third, there were worries that rapid expansion of classrooms would quickly surpass governments' recurrent funding capacity. These concerns, combined with the reluctance of the Bank to finance recurrent costs, resulted in a somewhat perverse distribution of Bank financing across countries. The poorest countries, with the greatest need but the least potential for expanding the recurrent budget, received few additional places, while richer countries, with better capacity in these regards, received substantially more.

Instead of itself providing large amounts for construction, the Bank pressed governments to expand places with their own, or private, funds. But during the 1980s, conditions changed in ways that greatly reduced governments' ability to act:

- Deteriorating macroeconomic conditions of the period ruled out across-the-board increases in government budgets, and education's share within the budget was already quite high in many countries. As a consequence, most countries found it difficult to keep up with population growth, let alone undertake many improvements.

- Budgetary shifts towards primary education within the education sector proved difficult because of the relatively great political power of the principal beneficiaries of secondary and higher education compared to that of scattered rural families. Their resistance was all the greater because of the poor economic circumstances.

- The scope for cost-cutting proved to be very limited for a variety of reasons, including, importantly, already inadequate input levels.[4]

- The scope for shifting financial budgets from central to local governments was also very limited because of the latter's narrow tax base. Efforts to shift responsibility to the local level for items such as repair and maintenance often meant that even less got done.

- Efforts to shift a greater share of educational costs onto the students and their families, particularly during the 1980s, was almost certain to have adverse equity effects at the primary level and adverse political consequences at higher levels.

- The increased use of private organizations as sponsors of basic education holds more promise. But ways need to be found to overcome tendencies to discriminate by income, class, or race, which in many countries is what led the government to nationalize the education systems after independence.

While all these measures will accomplish something, in poorer countries they are unlikely to do much more than keep up with population growth. For these countries, at least, significant progress towards UPE can only be made if the Bank and other donors are willing to provide more assistance to this subsector.

In the past, such assistance has been limited by reluctance to fund teacher salaries, the largest element of the primary school budget. This reluctance stems mainly from concerns that it weakens governments' resistance to pressures to expand civil service employment, already excessive in many countries, and would result in even more long-run dependence on foreign assistance.[5] To put these concerns to rest, mechanisms must be developed to ensure that additional funds would be utilized to good effect.

One mechanism for doing so is to develop a program for the sector to which all donors and the government agree to contribute. This would increase confidence that, collectively, all projects are contributing to the same end without excessive imbalances, for example, excessive funding for hardware and inadequate funding for software or visa versa. Another is to provide financial resources to individual schools on the basis of performance: either indirectly through scholarships or vouchers that would be turned over to schools selected by parents, or directly through capitation fees (payments to schools based on numbers of student-days of attendance). While such school funding mechanisms are not substitutes for minimum standards and curriculum specifications, they would put added pressure on schools to provide something considered of value by parents. Both mechanisms are being used to good effect in some countries and should be considered for use in Africa. Without moving in directions such as these, it is doubtful if donors can be encouraged to significantly expand funding for primary education.[6]

## Nonformal Education

According to Table 1, in 1985 over 50 percent of all adults in SSA had never attended school and over 90 percent had never completed the primary cycle. Because of higher enrollment ratios today, these figures should decline more rapidly in the future than they have in the past, but in many countries still not fast enough, given population growth, to reduce the absolute number of persons with little or no formal schooling. This is an obvious, continuing waste of human potential. What, if anything, can be done to provide these persons with at least some minimal education or training?

During the late 1960s, a variety of nonformal education (NFE) programs were proposed to answer this question, and a number were initiated by governments, donors, and NGOs. Some concerned adult literacy and numeracy, others focused on practical agricultural subjects, still others on home economics, health and hygiene, local history, and civics. In the early 1970s, the Bank commissioned a review of this experience. Under the leadership of Philip Coombs, the study, entitled *Attacking Rural Poverty: How Nonformal Education Can Help*,[7] pointed out the inequity and loss of productivity involved in leaving large numbers of people illiterate and unskilled, noted that there were feasible ways to deliver such programs to poor, remote communities at modest cost, and strongly urged the Bank to support such programs.

The Bank reacted favorably and proceeded to support a variety of programs. In Africa, most were small, often experimental or pilot efforts embedded in larger education projects. Typically, the largest portion of funding in these components was for foreign experts to help with curriculum development and the design and production of new teaching materials, though a few included buildings, furniture, and equipment that significantly raised costs. Unfortunately, few of these efforts accomplished much, and none achieved a significant degree of sustainability (independent of outside support). Ethiopia II (1971–79) supported the development of a number of rural education institutes, but the government did not quite understand or accept what the Bank had in mind and the buildings were converted to other purposes. A study to design and test low cost alternatives for basic education in Mali I (1973–80) was not carried out. Malawi II (1977–83) supported adult education centers which were not used as intensively as intended because of lack of cooperation from government agencies. Mauritania I (1974–83), which was meant to investigate the potential of Koranic schools to provide literacy and numeracy teaching, received insufficient support from religious leaders. Youth clubs established in Benin II (1982–89) taught some skills but neglected literacy and numeracy. The nomadic training centers of Somalia II never attracted the nomads to the extent anticipated and generally did not serve their purpose. Burundi III, one of the largest Bank-financed efforts in NFE in Africa, designed to promote literacy and increase earning power of youth and adults, came to nothing because of grossly inadequate preparation and attention to the institutional capacity to implement and administer the program; eventually the government abandoned the program because of its history of poor management and attendance. Only in Burkina I was there reasonable success with the rural education centers where an important modification was introduced during implementation to emphasize French. This rendered the centers more attractive by facilitating the education of participants beyond the basic level.

In addition, dropout, mastery, and retention rates appeared to be low. At least, this is the conclusion one can draw from a recent global review of adult literacy programs. This review found that each of these rates averages around 50 percent, so the overall effectiveness rate for some projects may be only 12–15 percent.[8]

Given this largely negative experience, the Bank lost its enthusiasm for the subsector. By the end of the 1970s, the prevailing view came to be that the resources used in NFE would be better used to expand primary education more rapidly so that there would be fewer persons in future generations who did not have at least a basic education. Since that time, only a few projects have been funded, and none in Africa between 1981 and 1991.

The result has been that the Bank has provided little for adult literacy programs in Africa during the last 15 years despite evidence of considerable need (both by those who have never attended school and by those whose school-acquired literacy capacity has deteriorated).[9] A 1984–85 review[10] of this experience showed that, for the 25 African countries with literacy rates of less than 65 percent, only 16 of the 72 loans/credits in education approved over the period FY70-85 included an adult literacy component. By comparison, in 18 other countries in the world with such low literacy rates there were 13 literacy components in their projects. Moreover, some of these latter components were massive in their coverage, compared to the generally pilot and experimental scale of the Bank's African efforts.[11]

This review concluded that it was not the principle of NFE that was at fault but rather the way the principle was applied—more specifically, that there were two main reasons for the disappointing results. First, too much was expected of these projects. In the enthusiasm of that time, they were promoted by some as alternatives to formal primary education. When they accomplished much less, disappointment and disinterest set in. The 1980 *Education Sector Policy*

*Paper* tried to correct this impression by arguing that NFE should be viewed not as an alternative or shortcut to formal education but as remedial, offering a "second chance for learning" or providing a "wide array of learning activities directly associated with work." But this argument did little to rekindle interest in the approach.

Second, proposals for such programs tended to be accepted indiscriminately, without much investigation of their merits, potential audience, costs, or implementation capacity. Borrower inputs into these projects were minimal, resulting in the absence of any sense of commitment or ownership; and Bank staff were largely inexperienced in this subsector. For example, most of these projects paid insufficient attention to the immediate usefulness to the participant of the materials being taught, despite evidence of the importance of this factor in explaining dropout, mastery, and retention rates.[12] Some even used primary teachers without adequate training in dealing with adults and reading primers meant for children, with the result that many adults felt insulted and lost interest.

The unfortunate aspect of this situation is that the Bank reacted by withdrawing interest rather than encouraging and, where necessary, funding research, pilot projects, and experiments to develop a viable approach. The review of adult literacy cited above notes that despite a sizeable literature on the subject, the determinants of literacy (and one can add, the consequences of literacy for individuals' productivity) still have not been studied through valid experimental or quasi-experimental research. The same can be said about provision of other types of basic skills for adults with little or no formal schooling. The challenge of finding cost effective ways to improve the productivity of adults who have little or no formal schooling remains unmet. The Bank should consider taking the lead in promoting work along these lines, particularly in Africa where the need is greatest.

As noted above, the Bank provided no funds to Africa for NFE during the decade ending in 1991. In 1992, however, an interesting project was initiated in Ghana with Bank support—the Literacy and Functional Skills Project. This project appears to have taken the lessons of past experience into account. Among other things, government officials have been involved in the planning and design from the outset; plans have been laid to develop and institutionalize the program so as to ensure adequate implementation and future sustainability; well-funded research, monitoring, and evaluation components have been included; a program of incentives and rewards to maintain volunteer interest has been included; and plans have been laid to produce appropriate reading materials for new literates, so as to maintain their interest and reduce the likelihood of their losing their skills after the program ends—all issues not adequately pursued in previous African projects. This is a promising development that should be watched with care to determine whether it can be used as a model for renewed efforts in this field.

## Secondary Education

Eighty-four percent of the funds provided by the Bank for secondary education were for general education, as opposed to vocational, secondary education (compared to 72 percent for all countries). In this field, the Bank's main contribution has been the provision of buildings and equipment for the expansion of the system, particularly in rural areas. At the same time, these investments were meant to support reforms the way in which secondary education had traditionally been conducted, including, for example, more experiential and experimental ways of learning, greater focus on science, technology, and practical subjects, and more flexible class schedules to achieve economies in use of space. Some of these reforms were supported by construction and equipment components, for example, science laboratories, workshops, and specialized areas like geography rooms. Others—for example, curriculum revision, improved maintenance, and management practices—were to come about because the government agreed to undertake these reforms, often with the help of technical assistance provided by the projects.

While the hardware elements of Bank investments were implemented more or less as planned, the efforts at reform were less successful and sometimes contentious. First, specialized teaching areas and equipment were often underutilized and poorly maintained. A variety of factors account for this in different circumstances, for example, over-enrollment that led these specialized rooms to be used as normal classrooms, shortages of specially trained teachers (science teachers, for example), lack of recurrent budget for laboratory supplies and maintenance, and persistence of habits of straight lecturing. The result was correspondingly smaller accomplishments: fewer secondary school graduates in science and mathematics ready for admission to more advanced training programs, persistence of shortages of science teachers, and slower development of scientific capacity generally.

Such problems reflected project design weaknesses, in particular insufficient recognition that the proposed reforms required more than the simple provision of equipment and buildings. Principals and senior staff had to be trained, among other things, in scheduling and in the use, care, and maintenance of the buildings and equipment. Teacher trainers (e.g., for science courses) needed to be trained, which meant upgrading relevant staff of universities and teachers colleges. A school supervisory service had to be developed and equipped to provide the necessary support in school management and pedagogy. Financing arrangements for schools needed revision to secure the availability of the recurrent funding for supplies. If parties affected by the reforms are to support rather than undermine their implementation, they must be 'brought on board,' ideally during the design stage. Prior to the mid-1980s, most projects failed to include such efforts.

Closely related was the Bank's promotion of "diversification"—the introduction of "practical subjects" into the curriculum. The goals and purposes of doing so varied from a desire to introduce a modern technological orientation to an interest in preparing students for entry into the labor force. The subjects introduced ranged from introductory home economics and woodworking to vocational and technical training. Workshops and equipment were often provided along with assistance to develop specialized curriculum. Some borrowers accepted this approach while others argued against it, seeing it as a diversion of funds from their principal goal of expansion of general academic schools.[13]

Over time, PCRs began reporting a variety of problems with this approach. Shortages of qualified teachers, usually because of inadequate teacher training programs, were commonplace. Graduates of more skill-oriented programs sometimes had difficulty finding employment, a result of faulty assumptions about the labor market and failure to involve potential employers in program design. Many students resisted entry into these programs, preferring other tracks that would provide them a better chance to continue their education. Lack of budget for supplies and maintenance was endemic, most commonly because borrowers were not committed to this approach despite their agreeing in covenants to provide adequate recurrent financing. Because of these problems[14]—plus the findings of a study of Colombia and Tanzania that secondary graduates from academic tracks did no worse, and sometimes better, in the labor market than graduates from diversified tracks—the Bank turned against "diversification."

This decision weakened efforts to introduce a technological orientation into the school system. If Africa is to compete in the world economy, its labor force must acquire such an orientation and the school system must play an important role in the process. The diversification approach was far from ideal; but the decision to drop it was not replaced with an alternative. In retrospect, it might have been better to have worked on improving and reorienting it than to have walked away from it.

Another persistent issue was student boarding. During the 1960s and 1970s, the Bank resisted requests for such facilities because of their high capital and recurrent costs. In some cases—Burundi and Sierra Leone, for example—the Bank agreed to provide only minimal facilities, a compromise that resulted in overcrowding. At the same time, it tended to favor large schools because of economies of scale in construction and operation. These two approaches conflicted with each other in many African countries where population densities are low. A more flexible approach that resulted in the establishment of a larger number of smaller schools in some cases and more boarding facilities in others, depending on the costs, would have been more appropriate.

These features of Bank involvement in this field, plus their associated problems, have resulted in a more modest impact on expansion, curriculum reform, and quality improvement than was expected from the sizeable investments that have been made.[15] However, the Bank did play a major role in terms of equity of access to schooling at the secondary, as well as at the primary, level. This is especially evident in Central African Republic, Gabon, Liberia, Sierra Leone, and Somalia, where the network of schools put in place with the assistance of the Bank did much to create new opportunities for rural dwellers and has therefore served as an important force for equity and upward mobility. The Bank also played a major role in the expansion of teacher training facilities within this subsector.

The remaining 16 percent of Bank lending for secondary education went for the establishment or expansion of vocational secondary schools. Here, too, the Bank's principal contribution was in the provision of buildings and equipment. The contribution to the elimination of skill shortages was limited, however. Technical secondary schools are costly to construct, maintain, and operate, and require well-qualified, experienced, technical staff and close coordination with local labor market conditions. All too frequently, maintenance and operating budgets were inadequate, appropriate staff were unavailable (at civil service pay scales), and potential employers were not involved in the choice and content of courses. As a result, graduates often could not find employment in their areas of specialization. These shortcomings are now well recognized.[16] The general notion today is that the Ministry of Education should focus on providing quality general secondary education and leave vocational training to institutions that are closer to the relevant labor market (for example, the Ministry of Industry), or better yet, to employers themselves if they can be encouraged to assume that responsibility.

## Higher Education

While other factors are involved,[17] a fundamental reason why Africa remains heavily dependent on foreign experts is that its higher education systems have not produced the kind and number of educated persons needed to replace these experts. The greatest need is for scientists, engineers, high-level managers, accountants, and auditors to fill high-level operating positions and to serve as teachers, researchers, and consultants. But inadequate numbers of students enroll in these areas and remain for the minimum three or four years necessary to acquire adequate backgrounds.

The quality of the education they acquire is poor and has probably deteriorated during the last decade; and faculty are not adequately serving the research, consultancy, and advisory functions that universities typically provide in addition to teaching.

Much of this can be explained by the rapid expansion of enrollment in arts and humanities, deteriorating budgets, and the high costs of producing a graduate, which have combined to force dramatic reductions in all the inputs necessary for competent teaching, research, consulting, and dissemination activities. High costs are a result of internal inefficiency (two-thirds of entrants fail to complete their program or take longer than scheduled to do so), student subsidies (which in the mid-1980s accounted for a high proportion of total costs, 55 percent in Francophone Africa and 12 percent in Anglophone), low student-teacher ratios, large nonteaching staff, poor management of available resources, and small size of some institutions. Skewed distribution of enrollments across subjects—too few in high priority fields and too many in arts and humanities—has both supply and demand components. On the supply side, universities have responded to pressures to increase enrollment by allowing more expansion of arts and humanities places, since they are much less expensive to provide than places for science and science-based professions (medicine, engineering, and so on).[18] On the demand side, historically, at least, there has been little incentive for students to spend the additional time and effort that science, engineering, and mathematics training require.[19]

Bank investments in this subsector have been modest. While it allocated 20 percent of its lending for education to Africa, it allocated only 11 percent of its higher education budget there. While it provided, in per capita terms, 66 percent more than the average for the whole sector in Africa, it spent 15 percent less on higher education. Within this subsector, the Bank spent significantly more on teacher training and less on universities and other institutes. While there is no basis for comparing Bank inputs by subject matter, Zymelman (1990) reports that in almost 170 education projects reviewed, only 12 make specific reference to the need to improve science education (although many more include components for laboratories), and most of these date from the 1960s and 1970s. The decline in interest thereafter coincides with a sizeable falloff in lending for higher education during the 1980–87 period, as can be seen in Annex Table 7. During the 1988–92 period, Bank lending for universities increased significantly while lending for teacher training and for other institutes fell.

What explains this pattern? During most of the period, there was a feeling that universities were spending too large a fraction of their budgets on low priority subjects and activities. This was why the Bank refused initially to lend to universities and then would do so only for special programs such as agriculture and engineering. In the 1970s when it began its poverty alleviation drive, it did not conceive of a role for higher education. Quite the contrary, the 1974 *Education Sector Working Paper* regarded secondary and higher education as consuming too high a share of the education budget, considering the limited need for modern sector labor and the small number of persons who directly benefitted. This position was reinforced by publication of a study indicating that rates of return for higher education were lower than for other levels, in particular for primary education.[20, 21] When government budgets collapsed in the 1980s, these arguments resulted in calls for cost recovery and shifts of savings from tertiary to primary levels to protect basic education. Few stopped to consider whether the gains in literacy at the primary level were worth the losses that occurred in managerial capacity, science, and engineering at higher levels.[22] The 1980 *Education Sector Policy Paper* corrected the imbalanced presentation of the previous policy paper by paying closer attention to the research, training, and outreach functions that higher education could usefully serve; but it had little discernable effect on lending policies and practices during the early 1980s.

By the late 1980s, the deterioration of African universities became so serious and pervasive that resistance to changing long-held positions weakened. Governments began to recognize the need for painful reforms despite their political risks; and the Bank began to recognize the inappropriateness in many cases of arguing that savings from university reforms should be transferred to other subsectors. The consultative approach stimulated by the 1988 African education policy paper helped.[23] So too did the publication of the Bank's study of African universities in 1992.[24]

The SARs for recently funded projects with higher education components speak to most of the problems of the sector. For example, the Nigeria Federal Universities Development Sector Adjustment Operation, to which the Bank committed $120 million in 1990, provides funds to a National Universities Commission to which individual universities can apply for funds to purchase books, journals, equipment, and services to enhance teaching and research, especially in scientific and technological fields, provided they have met certain eligibility criteria concerned with staff retrenchment, course rationalization, self-financing of hostels, and increases in revenues from nongovernmental sources. Similarly, the Kenya higher education project, for which IDA provided a credit of $55 million in 1991, is designed to rationalize and strengthen the institutional framework for higher education, promote cost sharing by improving the student loan scheme, promote staff development and provide equipment and other inputs for key areas such as science and engineering, and support applied research. The status of the student loan scheme is currently undergoing review due to difficulties with collection.

While broader than their predecessors, these projects are still fairly narrowly focused on immediate financial problems of specific institutions. Two later projects—Ghana and Mozambique—take more of a subsector and long-term developmental approach, considering the role of private institutions, curriculum development, and internal efficiency, as well as cost recovery and other financial problems. Even these projects, however, are weak on issues such as management training for university administrators, university management information systems, informatics, maintenance capacity, and personnel management.

Moreover, few of the recent projects pay adequate attention to process issues like consensus building, which requires a managed incubation period. This process should be completed *before* beginning to design a project. In Senegal, after many years of trying in vain to get something off the ground, the Bank decided to support workshops in which all interested parties are educated about the problems and invited to help find ways to solve them. A similar process, aided by the presence of Bank field staff during a critical period, has been utilized to good effect in Ghana. But these are uncommon approaches that seem only to occur when the task manager is predisposed or encouraged to operate in this way. They need to be applied more widely and systematically.

Finally, there is need for more coordination among external assistance agencies. All too frequently, a donor will provide support for an individual division without reference to any overall plan for the university or to what other donors are doing.[25]

There is, however, a danger involved in broadening these projects to include the whole range of issues faced by higher education. Funds are inadequate to accomplish everything. If priority is to be given to the goal of rapidly producing professional manpower with the capacities needed to replace expatriates, project designers need to consider incorporating some of the following principles:

- All countries need a small, but growing, cadre of individuals trained to international standards, to serve as teachers, researchers, advisors, and directors/managers throughout the society. Without them, they will not be able to compete economically with more dynamic societies and will continue to fall behind.

- To achieve such standards, a larger fraction of education and training budgets must be devoted to the required professions (and a smaller fraction to others). If, in the name of equity or for some other reason, budgets are spread too evenly and thinly across all students and disciplines, such a cadre will not be developed.

- This implies a two track system of education, and one that starts early enough to provide sufficient candidates for the next step in the higher track. For example, there would have to be two different types of science courses taught in the later years of secondary schools, one for those who plan to enter science and engineering professions, and another for those who plan to enter other occupations.[26]

- To identify the required professions, encourage students to enroll in them, and improve the relevance of the training in these fields, universities must become more directly and effectively linked to national labor markets. Among other things, this requires enlisting the help of major employers in the private and public sectors to serve on advisory committees to individual departments, to provide information on employment prospects to students, and possibly to help fund programs (which after all they benefit from).

- Simultaneously, ways must be found to reduce the brain drain. Although a major problem in a number of countries, it has not been given the concerted, systematic attention it deserves. Fundamentally, solutions must entail improving working, living, and status conditions for well-trained individuals. Among other things, this requires a broader and better-funded financial base for high-priority departments. Chapter 4 touches on several other pertinent factors.

While the SARs for recent projects seem more sensitive to the needs of higher level institutions, they sometimes discuss issues in ways that suggest that these principles have not been fully considered or accepted. An improvement could be made by making judgments (whether positive or negative) about these principles explicit and taking their implications into account in the design of future projects.

## Management of Education and Training

From the inception of its education lending program, the Bank recognized that many borrowers would need assistance to plan sector development and to generate and manage investment projects. Initially, the Bank provided such assistance through UNESCO.[27] The 1971 *Education Sector Working Paper* proposed broadening this approach to include support through Bank loans for the full range of management functions required to effectively operate an education system. The 1974 sector working paper reiterated the importance of management and called for more comprehensive educational planning than was typical of the time. The 1980 *Education Sector Policy Paper* criticized past efforts as ad hoc and disjointed, stressed the importance of developing national capacity in training, management, planning, research, and evaluation, and proposed more focused and sustained support for programs to develop such capacities.

In 1984-85, a Bank/UNESCO/ILO team reviewed the problems of institutional development and management of ministries of education in Africa with an in-depth look at the situation in five countries[28] and found serious problems in the following areas (Auerhan et al., 1985):

*Financing.* During the previous decade, (a) the share of the national budget allocated to education had declined, with the result that funding in real terms was reduced by 34 percent; (b) the share of the education budget allocated to administration had declined, with nonsalary items being hurt the most; and (c) the consequences were so severe that administrative staff could not carry out many of their functions (supervisors, for example, could not visit schools).

*Staffing.* Shortages of staff in nearly all professional categories—accountants, statisticians, architects, project managers, educational planners, school supervisors, and managers—were severe and growing as the school system continued its rapid expansion. These deficiencies affected everything, including the ability to prepare budget and foreign aid requests. The study found that there was need for a massive staff development program plus upgrading of the capacity of higher education institutions to train people for these professions.

*Administrative structure.* The establishment of separate ministries for different education subsectors had resulted in fragmentation and duplication of functions, (for example, a multiplicity of educational planning units, all short of staff) and unnecessarily high overheads. In countries where the education administration had been decentralized, shortages of qualified staff for local governments were even more severe.

*Physical facilities* for universities and the sector administrative services were found to be substandard, the only exceptions being certain administrative units in Bank-assisted projects.

*Information.* In all countries there was a dearth of relevant information services—statistics, research and evaluation studies, education materials, reference materials, library and documentation services—available to managers.

*Management training capacity.* While there were numerous initiatives to develop management training capacity, few of the resulting institutions were able to retain good staff, and few had developed a reputation for providing adequate and relevant training. The social sectors had generally been ignored by these training institutions.

During the 1960s, the Bank paid little attention to these areas. Since then, however, they have played an increasingly important role in dialogue, sector studies, and projects. The 1984-85 study found, for example, that, while only two of the education projects provided to Africa during the 1960s contained institutional development (ID) components, during the 1970s and early 1980s, only two did not have such a component. Moreover, the percent of project cost devoted to these components increased over time.

Early ID components limited their attention to management, planning, and studies associated with the generation and implementation of projects. For example, 72 percent of the projects contained assistance for project management and 64 percent included assistance for project development and planning. Broader areas, particularly if they were not funded by the projects, were of less interest. Assistance for school supervision was found in only 13 percent, examinations in 14 percent, financial management in 18 percent, personnel management in 9 percent, and management training programs in 32 percent of the projects reviewed. Projects funded after 1985, however, contained an increasing emphasis on sector management and operations.

In all but one of the projects reviewed, the principal form that assistance for ID took was expert services, though physical plant, equipment, and fellowships were also provided. The fellowship components, however, were generally quite small, and there was a notable absence of emphasis on long-term training to produce the specialists required for the sector.

The impact of these efforts has varied considerably. So far as *project management* is concerned, in those cases where excellent local staff were recruited, usually with a salary premium (e.g., Liberia and Sierra Leone), immediate results were good (though not sustained). Where results were poor, it was often because expatriate experts spent more time on operations than on training. Moreover, the project units were seldom incorporated into the Ministry of Education, with the result that capacity building in this field was slow to materialize.

In *educational planning*, while some useful work was done (Liberia, Sierra Leone), the overall picture was dismal. Well-trained planners were always in great demand for senior managerial jobs and many of them were promoted out of planning, some joining other agencies. Even without the high attrition rate, the numbers trained would have been too few. Projects usually provided one to three training fellowships, whereas at least three times that number in various specialized fields would have been more appropriate. The *studies and research* components were often not implemented, and if implemented, typically by outside rather than local experts.

Assistance for *central and district administrations* (whether large like Madagascar II, medium-sized like Liberia II, or small like Burundi I, II, and III) was generally well utilized. *Management training* efforts were also generally successful. The efforts to establish management arrangements for vocational training that brought ministries and employers together were successful in Côte d'Ivoire, Liberia, and Senegal, but not in Burundi and Congo.

Institutional development components have typically been neglected in PCRs and PARs, as have monitoring and evaluation components.

Considering the scale of the institutional problems in Africa, these efforts have to be regarded as meager by comparison with Bank ID efforts in Asia—for example, the curriculum development center in Malaysia, the primary education management component in the Philippines' elementary education project, the university development projects in China and Indonesia, and the nonformal education projects in Indonesia and Thailand. Typically, the African efforts were small, lacked depth and follow-up, seldom included a significant staff development plan, and seldom made significant use of local expertise. In other words, the African efforts at ID were not the centerpiece of the development effort in the education sector, as they often were elsewhere.

Responsibility for this situation must rest with the governments involved as well as the Bank. While the Bank can be faulted for not consistently developing and supporting long-term strategies to build local planning and management capabilities in Africa, borrowers' commitment and drive to achieve these ends were often quite weak. In most of the non-African cases mentioned above, borrowers pressed the Bank for assistance with these problems.

Recent PCRs and PARs suggest that most of the problems found in earlier studies are still present. On the other hand, Bank efforts to deal with these problems in Africa appear to have increased in number and size. During the 1988–92 period, almost two-thirds of the education projects approved by the Board included

ID as a major goal and contained specific funded components to support it. Whether these efforts will be significantly better than previous efforts remains to be seen.

### Alternative Delivery Systems

The search for alternative delivery systems that might provide an education of equivalent value to the traditional school program and quickly reach a larger clientele using fewer teachers and infrastructure makes particular sense in Africa given conditions existing there since independence. These conditions include the small capacity of the traditional school system, large and rapidly growing demand for places, desire to fill this gap quickly, shortages of financial resources and teachers, large numbers of people living in remote, low-density areas, large numbers of adults in need of basic education who must work during normal school hours, and special problems in reaching the poor.

During the 1960s and 1970s, this search resulted in a variety of efforts to establish distance learning programs. Some have failed, but a number have grown into sizeable, well-established institutions. These include programs that provide primary teacher training (for example, the Kenya Correspondence Course Unit established in 1964 and Tanzania's in-service teacher training campaign initiated in 1976), equivalent secondary school education (for example, the National Correspondence Course of Zambia established in 1964, the Malawi College of Distance Education established in 1965, and the Lesotho Distance Teaching Center), and individual courses for credit at the tertiary level (University of Lagos and of Ghana, for example). Use of radio and other means to supplement traditional classroom work has also expanded (the Kenya and Lesotho Radio Language Arts Programs, which use interactive radio to teach English to lower primary pupils, are particularly interesting and promising examples). Most of these programs rely on printed materials transferred through the postal system, but radio is also very common, and the use of audio cassettes is growing. Many are used in combination with face-to-face contact between students and teachers.

Reviews of results from these programs, as well as those in other developing countries, suggest the following conclusions.

- Correspondence courses in which students work independently at home without support from a study center are the least expensive per student, but not the least expensive per successful student. Only a small fraction of students are able to succeed in programs of this type and they are usually found only at higher levels.

- Programs that supplement conventional classroom teaching of special subjects, like language, arithmetic, and science, improve educational outcomes but cost more. Most costs are up-front fixed costs; if they can be afforded and spread over a large number of students, the "benefit-cost" ratio is favorable. Given Africa's difficult economic circumstances, expansion of such programs must rely on donor support; once established, however, their operating costs should be affordable.

- Programs offering secondary education as an alternative to conventional classrooms work best when students are brought together in study centers. An examination of Malawi's program which uses this approach found that the per student costs were between one-fourth and one-fifth that of a day secondary school, and the cost of producing a full examination pass was less if more than 20 percent of the study center students passed (in recent years, more than 40 percent have been passing).[29]

- Distance programs for both pre-service and in-service teacher training have produced good results and modest costs. In Tanzania, costs per teacher trained were found to be one-fourth that of using conventional methods. Other programs that combine distance education with residential course elements were found to produce at least as good teachers as well as significant cost savings.[30]

- Cost comparisons are especially favorable for programs aimed at employed adults since the cost of traditional schooling must include work foregone.

- Equivalency programs have a clear positive impact on equity since they provide access to previously excluded groups. This is one of the most important benefits of these programs.

African programs have sometimes run into problems because of low enrollments which result in high costs per student and because of underfunding of recurrent costs. Both problems can result if distance education is viewed as inferior to conventional education—a commonly held view in Africa. Ways to cope with this problem[31] boil down to two main approaches: spend the extra money necessary to ensure that the distance program is of especially high quality, until such time as it is accepted; or incorporate the distance program into the conventional program so that all students experience both. One can imagine, for example, all teachers being trained using a combination of distance education for academic subjects and residential courses provided by teacher colleges for subjects requiring practical and laboratory work.

The Bank's role in this development has been limited to monitoring, reviewing, and assessing developments and in the process disseminating information about these approaches.[32] It has done little to support field research (for example, pilot projects or studies to test different approaches), to promote policy developments in these directions,[33] or to support such activities in projects it has funded. Through 1987, only nine countries in SSA had received Bank funding for projects containing distance education components. Fourteen education projects (out of 104) and one noneducation project[34] contained such a component. Typically, these components were such small portions of the overall project as only to be mentioned in passing in Project Completion and Evaluation Reports. A good description of the education projects with such components is contained in Hawkridge (1987). Table 4, derived from that source, provides a breakdown of these projects by education level and a comparison with other regions which indicates that this neglect was not limited to Africa alone. Indeed, there are even fewer Bank-funded projects with distance education components (per country or per capita) in the rest of the world than there are in Africa.

Several reasons can be suggested to explain why the Bank has not done more to search for

TABLE 4: BANK EDUCATION PROJECTS WITH AND WITHOUT DISTANCE EDUCATION COMPONENTS, FY63–85

| | | | | *Number of Components by Education Level* | | | | |
|---|---|---|---|---|---|---|---|---|
| | *All* | *Projects with Components* | | | | *Teacher* | | |
| *Region* | *Projects* | *Total* | *% of Total* | *Primary* | *Secondary* | *Training* | *Nonformal* | *University* |
| Sub-Saharan Africa | 104 | 14 | 13.5 | 8 | 4 | 3 | 7 | 0 |
| Other Regions | 198 | 18 | 9.1 | 8 | 3 | 3 | 10 | 2 |
| Total | 302 | 32 | 10.6 | 16 | 7 | 6 | 17 | 2 |

*Source:* Tables 4 and 5, "General Operational Review of Distance Education," Hawkridge, 1987.

and encourage the implementation of promising alternative delivery systems. First, in the early days of Bank lending for education, the focus was on construction of school buildings, the implicit assumption being that that was a critical bottleneck and that other donors plus the government would provide other inputs. Also, in these days, there was an unrealistic view that expansion of the existing school system would be adequate to achieve educational goals in a reasonable time. Second, at the end of the 1970s, startup problems, efforts to introduce complex and expensive technologies like television, and failure to adequately fund recurrent costs resulted in a number of failures that gave the whole field a bad reputation, particularly in Africa. The Bank's involvement in the aborted efforts to introduce educational television in Côte d'Ivoire is a case in point (see PCRs and PARs for the first and third education projects). The Bank's reluctance in the 1970s and early 1980s to fund recurrent costs of such programs has not helped.[35] Risk aversion, biases in favor of familiar approaches, and the perception of new technologies as a threat to traditional approaches have also played a role.

Given the seriousness of Africa's human resource problems and absence of resources to solve them in a reasonable period of time using conventional approaches, the feasibility of distance education in Africa needs reexamination. Consideration should be given to funding pilot schemes and absorbing a larger portion of incremental recurrent costs until their value is established and accepted. At a minimum, the Bank should sponsor more research to assess and improve existing schemes.

## Female Education and Development

It is now well demonstrated that female education provides high economic and social returns.[36] These include not only the direct economic benefits of higher productivity and wages but also major indirect benefits of smaller families and healthier children. The benefits of lower fertility are especially important for Africa where the capacities of education systems have been continually outstripped by high population growth rates, and, more basically, where population growth is slowing the entire growth process and destroying the region's endowment of natural resources. Robust child health and nutrition is also critical if children's learning potential is not to be stunted.

As in most other developing countries, women lag behind men in the amount of schooling and training they receive. But while at least modest progress has been observed elsewhere, the data for Africa as a whole show little if any improvement. According to the last column of Annex Table 1, female educational attainment in Africa was 60 percent of male attainment in 1960 and declined to just over 50 percent in 1965 where it has remained through 1985 (the last year of comparable date). While the numbers of females exposed to some primary education have improved over this period—indeed by more than that of males—there has been a deterioration in the minuscule percents completing primary and secondary school. Girls tend to leave school earlier than boys for similar reasons found in other parts of the world—to assist with household and farm chores including care of younger siblings, to protect them from the perceived risks of attending school after puberty, to meet cultural requirements for marriageability, and because the value in terms of better job opportunities of completing primary school is perceived to be low.

As Table 5 indicates, a few Bank-supported projects recognized gender issues and included significant actions even in the 1970s; but the percent of projects with these characteristics increased dramatically only during the 1980s. Indeed, they are significantly higher for noneducation projects in Africa. This is probably a

### TABLE 5: PERCENT OF BANK-ASSISTED PROJECTS WITH WID ELEMENTS, FISCAL YEARS

*A. Education Projects by Level*

| | *1972–80* | *1981–91* | | *1972–81* | *1982–92* |
|---|---|---|---|---|---|
| *Projects with Primary/Secondary/ Teacher Training Components* | | | *Projects with Higher Education Components* | | |
| Africa | | | Africa | | |
| No discussion or action | 80.5 | 25.0 | No discussion or action | 71.7 | 25.2 |
| Discussion only | 15.2 | 53.8 | Discussion only | 19.6 | 54.8 |
| Significant action | 4.3 | 21.2 | Significant action | 8.7 | 20.0 |
| All Regions | | | All Regions | | |
| No discussion or action | 71.4* | 26.1* | No discussion or action | 30.8 | 23.1 |
| Discussion only | 19.0* | 49.6* | Discussion only | 58.7 | 49.6 |
| Significant action | 9.5* | 24.3* | Significant action | 10.5 | 27.3 |

*B. All Projects*

| | *1988* | *1989* | *1990* | *1991* |
|---|---|---|---|---|
| *All Education Projects* | | | | |
| Africa | | | | |
| No discussion or action | 87.5 | 25.0 | 33.3 | 12.5 |
| Discussion only | 0.0 | 25.0 | 0.0 | 62.5 |
| Significant action | 12.5 | 50.0 | 66.7 | 25.0 |
| All Regions | | | | |
| No discussion or action | 61.1 | 25.0 | 26.3 | 20.0 |
| Discussion only | 11.1 | 31.3 | 26.3 | 45.0 |
| Significant action | 27.8 | 43.0 | 47.4 | 35.0 |
| *All Projects* | | | | |
| Africa | | | | |
| No discussion or action | 77.5 | 59.3 | 55.3 | 32.9 |
| Discussion only | 6.3 | 4.9 | 8.2 | 15.9 |
| Significant action | 16.3 | 35.8 | 36.5 | 51.2 |
| All Regions | | | | |
| No discussion or action | 83.9 | 70.7 | 63.8 | 46.2 |
| Discussion only | 5.1 | 6.7 | 6.8 | 14.0 |
| Significant action | 11.1 | 22.7 | 29.4 | 39.8 |

*Source:* 1972–80 and 1981–91 figures derived from B. Herz et al., 1991, Table 4.2, p. 56.

result of the fact that a larger fraction of African women have independent responsibility for farming and agricultural marketing activities, making them easier to reach and more interested in responding to specifically targeted initiatives. This interest was demonstrated in early agricultural training projects in which the assumption that only men would be interested in attending proved to be far from the mark. A consequence has been that the percent of Bank-assisted agricultural projects with significant "Women in Development" (WID) actions has been consistently higher than in other parts of the world and has been growing rapidly. Between 1988 and 1991, this percent increased from 28 to 83 percent, compared to figures for all Bank-supported agricultural projects that increased from 16 to 57 percent.

Historically, then, the role of women in development has been addressed more emphatically in sectors other than education. It was only recently that the Bank began systematically to build up its knowledge base on female education issues and to disseminate to staff the potential developmental benefits of female education and examples of interventions which held promise for project design. It is still too early to observe how effective projects built on these initiatives are likely to be.

In the 1970s and early 1980s, the most typical intervention in education projects was to increase the number of places and boarding facilities for girls in secondary schools. This approach has proved of limited value. The second (1975–80) and fourth (1981–85) education projects in Malawi are cases in point. During the period of the second project, female enrollment increased marginally, the main effect of the project being to shift enrollment from day schools to boarding schools, with the places in day schools released by girls being taken up by boys. The fourth project apparently resulted in similar shifts with somewhat greater increases in overall enrollment (though it is not clear how much of the increase can be attributed to the project itself).

Results such as these have led to more systematic consideration of the variety of factors that cause lower female enrollment rates at secondary and higher levels[37] and to the notion that what is needed is a package of interventions, an approach that is beginning to be reflected in more recent projects. An example of a project based on such consideration is the Senegal Second Human Resources Development Project (signed in 1993) which supports the government's policy to boost female participation in primary education within a general policy to improve access to schools in underserved rural areas and to enhance educational quality. The project helps develop broad-based programs at the level of the school, home, and community to raise girls' enrollment and pilots targeted interventions in selected departments where girls comprise less than 41 percent (the national average) of primary school enrollment.

Likewise, training projects with WID components have evolved from simply providing women with vocational skills to strengthening the linkage between this training and the job market for these skills. The Madagascar Manpower Training Project (1993), for example, tries, among other things, to change attitudes towards hiring and promoting women. The Bank (through EDI) cooperates with UNDP and ILO in providing training in Africa to female small entrepreneurs under the Women's Management Training Outreach Program, a program that includes support and training to leaders of local women's organizations.

In noneducation projects—and leaving aside population, health, and nutrition projects in which the nature of the interventions are more obvious—the typical intervention is concerned with female employment. For example, Zambia's Economic Recovery Program II includes a component aimed at providing income-generating activities for women-headed households, and the Second Transport Rehabilitation Project in Ghana (1990) includes a pilot program focused on women's employment in a specially-designed labor-intensive road program. While it is too soon to know how effective these efforts will be, it is useful to point out that the provision of employment per se is insufficient to promote human resource development. For the latter, the terms of employment, the nature of the work, and the possibilities for advancement are critical. Employment as unskilled labor on a road project with no possibility of advancement may be worse for development of women's capacity and status than employment in self-sufficient agriculture where, with help in the form of extension services and possibly credit, individual initiative is more likely to be rewarded. Projects in agriculture and small enterprise development aimed at women are moving in this direction.

It is probably appropriate that most WID interventions in Africa have been in projects outside of the education sector. Projects that merely increase the supply of places and participation of girls in school are likely to quickly run into demand constraints, in large part arising from limited employment prospects in jobs that require educational qualifications. These demand constraints in turn often emanate from entrenched customs and cultural attitudes (marital patterns, religious values, and so on) which work against female employment. To encourage wider participation of women in income generation and productive development activities, it is essential to address labor market constraints and underlying social factors as well as supply side constraints in terms of female education. Secondly, given the low overall enrollments in Africa, for boys as well as girls, and given the overall insufficiency of school places, it is difficult to make a convincing case that girls should be targeted for affirmative action, Especially, for example, in very poor communities, proposals to provide girls with anything extra (uniforms, special classrooms, or facilities) are likely to be rejected as inequitable.[38] Moreover, projects are unlikely to have lasting positive effects if they aim for changes in the education and socio-economic participation of women without also preparing men, in the home, workplace, and community, to support the changes.

Insights emerging from studies and ongoing projects in other regions as well as Africa indicate that national level policy is important in a number of ways. First, public education and awareness activities are needed to promote an appropriate climate for social change and a sense of mission to provide equal educational opportunities. Second, national-level measures are needed to set standards for revising textbooks and reading materials to include female role models as well as male. But mandates from the national level have limits. They are not able to ensure that policies are implemented effectively at classroom and community level. For this, local education managers and community leaders need to be supportive and proactive, for instance, in providing girls with enrichment programs in traditional "male" subjects such as science and mathematics so that qualified girls can enter these fields at more advanced levels. Unless there is local commitment, the risk is high that girls' participation will suffer by neglect.

In sum, it is now recognized that simple interventions focused on changing one or another aspect of the schooling situation for girls are likely to be inadequate to make a significant difference in female enrollment rates, and that more complex packages that include demand-side interventions, twin national-level policy with local, context-specific interventions, and take locational considerations into account (for example, providing more schools closer to girls' homes) are likely to be required. Such notions are only now beginning to affect project design. Several more years of experience, plus effective monitoring and evaluation of these initiatives, will be required to determine their effectiveness.

## Performance, Impact, and Assessment

One of the frustrating aspects of this study has been the lack of information on project outcomes and costs. Staff Appraisal Reports for education projects do not estimate expected benefits or present adequate cost effectiveness analyses; and they seldom make adequate provisions (through monitoring and evaluation components or otherwise) for the gathering of appropriate data on outcomes and unit costs so that an ex post assessment of this type can be made. Frequently, project goals are not even stated in clear, monitorable terms. Without such information as a starting point, it is not surprising to find that project completion reports include no analyses of benefits relative to costs. The result is that, after 30 years' lending, the Bank still knows little about the impact of its education projects on proximate output measures such as quality, access, and internal efficiency, let alone their effects on development.

The only assessments available on a systematic basis are OED's project performance ratings (Annex Table 10), which have more to do with implementation than with outcomes. These show that education projects, while having ratings slightly higher than all projects in Africa, have distinctly poorer ratings than education projects in other regions. They should serve to strengthen the sense of urgency to correct this problem.

An important reason for these shortcomings is the difficulty of getting consensus on what constitutes outputs from education (e.g., student test scores, worker productivity) and in establishing quantitative relationships between school inputs and outputs (even though they may seem intuitively sensible, for example, science equipment and student test scores in science). SARs and PCRs are not the vehicles for establishing and quantifying such relationships. This suggests the importance of gearing Bank sector work and research in the education field to the development of materials necessary for undertaking satisfactory ex ante and ex post project analysis. In fact, the Bank has come a long way in this direction. During recent years sector work has attempted to establish more quantitative linkages between inputs such as provision of textbooks, processes such as teaching methods, and student achievement scores. The greatest challenge will be to extend such analysis backward, to take into account costs, and forward, to add information on external productivity, so that eventually, one might be able to say something about the developmental impact of educational investments.

Two recommendations can be made to begin the process of rectifying this situation. First, a long-term sector plan—better yet, a human resource development plan as suggested in the concluding chapter—should be developed for each country, which identifies individual projects with specific steps necessary to achieve the plan goals. This would provide sector-level criteria by which to judge the importance, relevance, and accomplishments of specificprojects. Second, a baseline and an end-of-project evaluation survey should be conducted as integral parts of all projects (as is routinely done, for example, in all population and health projects in India). The recent ECON Report[39] provides additional recommendations to move the process of developing adequate evaluations even further along.

## Conclusions

The issues discussed in this chapter suggest a number of tentative recommendations:

- Focus on sectoral policy issues, including institutional and management issues and relevant financial issues lying outside the sector;
- Guard against dropping new approaches too quickly when signs of problems appear without substituting anything else to achieve the underlying goal, and the subsequent need to provide sustained support for what is found to be promising;

- Pay greater attention to higher education, focusing on fields that will produce capacity for planning, management, research and consulting capacity in disciplines strategic for development and for a reduction in dependence on foreign experts;
- Use caution in the expansion of primary educational facilities in poor countries without the capacity to meet operating costs unless the Bank is willing to fund teacher salaries, which is not advised;
- Reconsider notions of basic needs, equity, professional competence, and elitism when applied to the education system; and
- Become more serious about project justification and evaluation—to provide something more than faith that a given investment in education is the best use that can be made of scarce resources.

During the last five years, there have been scattered signs that a number of these points are being taken into account. The numbers of higher education projects aimed at improving performance rather than transferring savings out of the sector has increased. A promising monitoring component has been included in a recent Uganda project. A few other projects include "National Assessment" components. The funding approach recommended in Chapter 2 is being developed for inclusion in two new projects. At a minimum these new initiatives demonstrate the feasibility of moving in these directions.

## Endnotes

1. Romain, 1985.

2. No places were included prior to 1976. Over the whole period, only 18 of the 31 African projects with primary education components included funding for places. Moreover, the distribution among countries of such places was somewhat perverse, fewer being received by those with the lowest enrollment rates. Burkina Faso, Chad, Guinea, Mali, Mauritania, and Niger, for example, received no places prior to FY85.

3. South Asia received less, but this was due to unwillingness on the part of India to borrow for primary education during this period.

4. Nonsalary expenditures (e.g., for textbooks or repair and maintenance of facilities) in many cases were already below the minimum necessary for dispensing education of even modest quality. Raising teacher/student ratios was not practicable in urban schools where they were already high and in rural schools where effective demand was low because of low population densities. Restructuring teacher salary scales was difficult as it affected the entire civil service structure. Resistance from teacher unions frequently frustrated proposals to move towards double shifts, lower entry qualifications (and hence pay) of new teachers, and increase time required between steps on the pay scale. A more promising approach, multiple-grade teaching, had not yet gained sufficient acceptance and would have required massive teacher retraining and upgrading efforts. Other possibilities—for example, reducing the primary cycle by eliminating non-core subjects and activities, and reducing teacher contact hours without reducing student work hours (by using older students or teacher assistants to supervise students and giving students more independent reading assignments)—were not seriously considered.

5. The argument is often stated in terms of unwillingness to fund recurrent costs, but this just confuses the issue. In creating human capital, teacher salaries are as much an investment cost as are the salaries of workers involved in creating physical capital. But calling them capital costs should not make them more legitimate items for donor funding if such funding reduces budgetary discipline and increases dependence.

6. In Bangladesh, for example, a consortium of donors led by the Bank funds one large population project every five years or so. A similar mechanism is being developed for use in the primary education subsector. In addition, a new education project is providing stipends covering tuition and half of personal expenditures to girls in grades 6 through 10 that can be used in any school of their choice; the stipends are paid to individual schools and are available for expenditures over and above their regular budget. Vouchers are used in Chile as the primary mechanism for funding schools, in Colombia to allow poor children to attend private secondary schools (until the public schools can expand sufficiently), and are being proposed for use in Brazil.

7. Coombs and Ahmed, 1974.

8. Abadzi, "What We Know about Adult Literacy: Is There Hope?" World Bank, SAIFH Draft, 1993.

9. As of 1990, according to UNESCO estimates, some 18 African countries had illiteracy rates of 50 percent or more, and the rate for some countries had actually increased during the last 15 years.

10. Romain and Armstrong, 1987.

11. See, for example, the three Bank-supported nonformal edu-

cation projects in Indonesia. There have been several major literacy campaigns in Africa—in Ethiopia, Somalia, and Tanzania, for example—but they have not been supported by the Bank.

12. Abadzi, 1993.

13. In negotiating the second Tanzania education loan, the government requested funds to expand standard secondary schools while the Bank offered specialized facilities. In the end, a compromise was reached in which some of both were provided. In preparing the first Senegal project, negotiations almost broke down over the government's refusal to adopt diversification in its lower secondary schools. In the end, the project was processed without funds for lower secondary schools.

14. Reviewed in Haddad, 1987, "Diversified Secondary Curriculum Projects: A Review of World Bank Experience, 1963-1979." Report No. EDT57. Washington, D.C.: World Bank.

15. Unfortunately, this judgment cannot be backed with adequate numbers. Despite the fact that the secondary subsector was the first to be assisted and that for the first 12 years it was the principal area of Bank interest, there has been no comprehensive analysis done on the impact of Bank lending for this purpose in Africa or the world generally.

16. See, for example, John Middleton, 1988.

17. Including, importantly, the nature of African development strategy and the terms on which TA is provided (see Chapter 1).

18. Management training has been inhibited by the traditional structure of disciplines and by barriers to students taking courses in different disciplines.

19. Up to about ten years ago, most governments still guaranteed jobs to all graduates. Since student stipends as well as government pay scales after graduation were the same no matter what subject the student studied, and since students were not counselled about career opportunities, there was a tendency to enter fields that take less time and effort. Then, as economic conditions during the 1980s worsened, it became increasingly difficult even for graduates with training in the high priority subjects to find entry jobs in the private sector. Since most governments have had to drop job guarantees for graduates, this situation may be changing; but it will require a more dynamic economy to make a significant difference.

20. See for example Psacharopoulos, 1973 and 1981. Typically, these studies compare private returns to an additional year of education with the public (and private) costs of that year. The conclusion is only applicable to the question of how funds for education should be allocated to different years of schooling. But universities serve other functions as well. Especially in poor countries, they are the principal source of research, consulting, and advisory services (to the extent these services exist at all). In addition, universities serve as intellectual bridges linking African countries to global networks of scientific and intellectual information; and they set the standards for the entire education system by producing teachers, policy makers, curriculum developers, and so on. Had expected returns from these activities been factored in, the conclusion might have been very different. This is only one of the reasons why the findings from these studies should not have been used to argue for reallocation of resources within the education sector. Others include use of market rather than shadow prices and wages, absence of allowance for other social benefits and costs (e.g., the socializing effect of primary education and the benefits of substituting university staff for expatriates as advisors and consultants), and the use of a static framework that did not allow for changes over time or for changes in policy (e.g., adequate funding of operating costs). These factors were ignored at the time because the findings agreed with most peoples' prejudices and were supportive of Bank policies made for other reasons. They may also have been ignored at the time because the effort to take them into account would have opened up a Pandora's box of analytical problems from which few useful conclusions could have been drawn.

21. It was also reinforced by the notion that a solid elementary base should be established before giving priority to higher education levels. But the elementary base requires teachers, managers, and leaders, as does every other social sector. The education pyramid in Africa is already much flatter—wider at the bottom and narrower at the top—than elsewhere in the world, including in most countries at similar levels of income. Should it be made even flatter?

The argument that it should is related to the general notion that social development follows, or should follow, the same course as human development—put more prosaically, that countries need to learn to walk before they learn to run. But if the analogy is to be useful, it should be completed. Just as parents guide their children's development, higher education institutions are needed to guide the development of lower level institutions. Moreover, children learn to run earlier and better when trained by experts than when left to their own devices or guided by others only slightly more skilled than they.

22. A commentator noted that the Bank's main concern has been to reduce subsidies for non-academic activities like living expenses. Such a change would reduce the number (and change the composition) of students entering these fields. Moreover, we can still question where any savings from reduced subsidies should be spent.

23. This led to the establishment of the Task Force of Donors to African Education which in turn established a Working Group on Higher Education. The latter has held regular meetings with African educators that have enhanced everyone's understanding of the problems and their differing perspectives and resulted in a commonly accepted set of recommendations.

24. Saint, 1992.

25. A promising step to addressing this problem was the creation in December 1990 of the Working Group on Higher Education, constituted under the Task Force of Donors to African education and coordinated by the World Bank.

26. While the notion of a two-track system is especially distasteful in Africa because of its colonial heritage and the egalitarian socialist philosophy of the 1960s and 1970s, it is a fact of life that different professions have different educational requirements.

that students have different interests and capacities, and that budgets are limited. From an egalitarian point of view, what is important is equal opportunities to compete for limited numbers of places in different tracks, not the elimination of different tracks. This invokes the need for providing good quality basic education for all, including minorities, girls, and children in remote areas.

27. UNESCO's International Institute for Educational Planning (IIEP) was funded to undertake training and studies in educational planning, and the Bank/UNESCO Cooperative Program was established to assist countries identify and prepare projects for Bank financing.

28. Cameroon, Madagascar, Mali, Sierra Leone, and Zambia.

29. Murphy and Zhiri, 1992, pp. 140. According to Ward Heneveld (in oral communication) more recent evidences suggests that this program is not working well.

30. Ibid, p. 142.

31. Op. cit., pp. 143-4.

32. Highlights include Perraton, 1982, and Murphy and Zhiri, 1992.

33. The 1971 and 1974 *Education Sector Working Papers* and the 1980 *Education Sector Policy Paper* (reissued in 1985) devote a couple paragraphs each to mass media techniques and recommend their consideration for use; but especially in the first two, most of the space is devoted to explaining why TV should not be used especially in poor countries. *Education in Sub-Saharan Africa* provides boxes extolling the virtues of three programs in SSA but does not feature such approaches in its recommendations. The materials prepared for the *Education for All* initiative (1990) call for use of all methods including nonformal and radio where appropriate and where standards can be maintained.

34. Nigeria Agricultural and Rural Management Training Institute Project.

35. This problem is now well recognized and may be on its way to solution. An example is provided by the Bank's treatment of the Malawi College of Distance Education (MCDE). The third and fifth education projects provided facilities and equipment for upgrading and expanding this institution, the implicit assumption being that other necessary inputs would be provided by the government. But "due to persistent shortages of self-learning materials and radio receivers, plus lack of trained teachers, the centers inevitably resort to conventional teaching methods. But because of lower quality teachers, overcrowding, shortage of instructional materials, the MCDE centers are not on the whole functioning as full-fledged distance education centers, but at best as conventional secondary schools, albeit of lower quality than the conventional schools. However, the quality of some of the MCDE Centers is being upgraded under a follow-up project (Education Sector Credit I)."

36. See for example *Letting Girls Learn: Promising Approaches in Primary and Secondary Education*, by Barbara Herz et al.; and *Women's Education in Developing Countries: Barriers, Benefits, and Policies*, by King and Hill (1993).

37. See Herz et al., 1991.

38. It is interesting to note, however, that girls are being targeted for preferential treatment in Bangladesh without serious resistance at the secondary level.

39. "Economic Analysis of Projects: Towards an Approach to Evaluation for the 1990s," draft final report, June 10, 1992.

# 4. Technical Assistance

During the last two decades, Africa has received a disproportionately large share of the funds the Bank has devoted to technical assistance. Yet most studies of these and other agencies' activities in this field suggest that dependence on this form of human capital has not been appreciably reduced. There is considerable agreement among these studies on the reasons for this situation and what should be done about it. Moreover, following the approval of the action program based on the work of the Technical Assistance Review Task Force (TARTF), there is evidence that these recommendations are being taken into account by Bank staff. But the gap between practice and recommendations remains wide. This suggests that there may be other factors at work. After reviewing this situation, this chapter speculates about what these factors might be and what might be done about them.

## The Problem

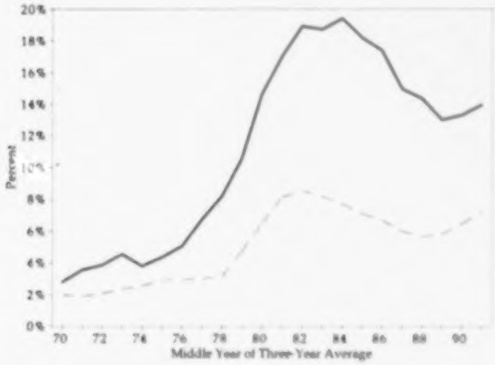
Annual expenditures on TA, defined here to include project-related training, have grown to well over $3 billion in the late 1980s, making it more than a fourth of all Official Development Assistance received by Africa.[1] Bank funding for this category in Africa has also grown, both as a fraction of its total commitments to Africa and on a per capita and a per country basis (Figure 7). During the second half of the 1980s, it amounted to some $400 million per year, about 15 percent of total Bank lending to Africa (compared to 5.5 percent to all regions).[2] These are sizeable amounts—2.5 times more than Bank commitments to education during the period, for example. Figure 8 provides an indication of how the total and various components have grown over time in constant prices. The period of most rapid growth corresponds with the major expansion of structural adjustment lending.

In the early days of Bank lending, most TA was associated with the development or implementation of investment projects, providing feasibility and engineering studies, project management, and other professional services. Over the years, and particularly in Africa, the focus has shifted from this so-called "hard" TA to "soft" TA—the provision of training plus experts and consultants for institutional development—the latter now constituting 75 percent of the total. TA is delivered both as free-standing projects and as project components. As Figure 8 indicates, the latter is by far the largest amount. Most of the funds are used to provide resident advisors, consultants, and experts to these countries. The second largest category of funds is provided for overseas fellowships (included under both the training and the TA project categories of Figure 8).

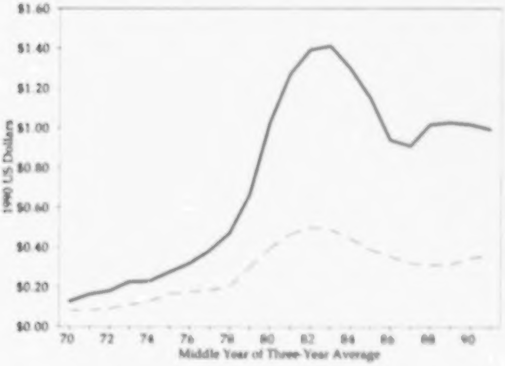
Nearly all studies of these activities conclude that they have yielded disappointing results.

Figure 7: Trends in Lending for Technical Assistance and Training, Africa and World

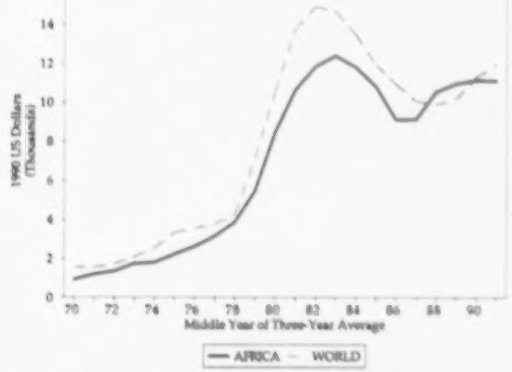
A. Percent of Bank Lending



B. Per Capita Lending



C. Per Country Lending



While output is greater than it otherwise would have been and substantial training has occurred, dependence on expatriates does not seem to be receding, certainly not rapidly enough to see an end to such massive TA programs and their high costs. Indeed, some analysts believe that these programs have been counterproductive, actually creating more dependency than capacity.

In passing it should be noted that dependency is not highly correlated with the numbers of expatriates in a country; if it were, we should have to conclude that it is increasing everywhere, including in OECD countries. Rather, it must be judged by considering the functions these expatriates serve and how decisions about them are made. Is the proportion of short-term to long-term resident advisors increasing; is their subject matter focus changing and moving from lower-order to higher-order skills; is the proportion of expatriates serving in advisory positions as opposed to line positions increasing; are more of the advisors providing policy and technical advice as opposed to ensuring the smooth implementation of donor-assisted projects? Does the locus of planning and decision-making with respect to their activities increasingly lie in recipient institutions? If questions such as these can be answered in the affirmative and if these gains were achieved at reasonable costs, we should conclude that progress is being made towards reducing dependency even if the aggregate number of expatriates is increasing. While the information base on which to answer such questions is poor, it has begun to improve in recent years, thanks to the accumulation of a variety of individual country and donor studies and UNDP National Technical Cooperation Assessment and Programme (NATCAP), started in the mid-1980s. The key conclusions of these materials can be summarized in the following five points.

(1) "Gap-filling TA", to operate various systems and to provide specialized training or high-

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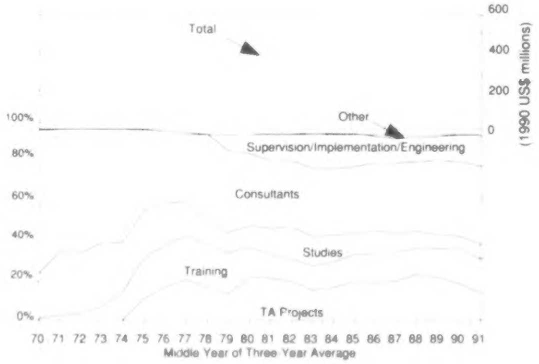
level policy advice not available in the country has been reasonably successful and sometimes indispensable. But even this form of TA has its problems. First, there is a natural tendency to recommend technologies, management procedures, and organizational arrangements with which the consultant is most familiar, rather than attempting to adapt these features to local conditions. As noted in Chapter 1, this tendency—plus distortions in market prices—explains the failure to make greater use of intermediate technologies and the excessively capital- and skill-intensive forms of production found in Africa. Second, problems in the selection process (inadequate selection pools, lack of control by recipient agencies, and weak planning and coordination) sometimes result in poor choices of candidates. Third, expatriate personnel sometimes continue to be used despite the availability of adequately trained and experienced local personnel. Perhaps the most important reason for this situation is that the personnel are provided free or nearly free to recipient agencies and are therefore often preferred to locals with the same skills and experience. In addition, donors want "their" advisors in the field for a variety of reasons in addition to gap-filling—to serve liaison functions, to monitor compliance with lending conditions, to ensure proper use of donor funds and equipment, to satisfy domestic aid constituencies[3]—and governments accept them because of their desire for other project components, for example, equipment and fellowships.

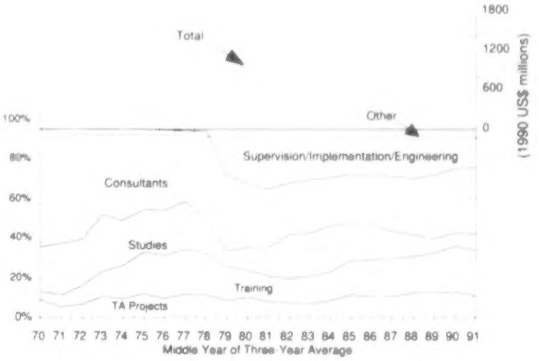
(2) TA for training has not worked well. Three delivery modes are in common use: the expert-counterpart model in which knowledge is transferred from expert to counterpart working together at the same job, domestic training programs, and overseas fellowships. The expert-counterpart model has been a disappointment, especially in Africa. All too frequently, a counterpart is not appointed; but even when appointed, it is common to find that one or the other of the parties is inappropriate for the task (e.g., the expert is not good at training or the counterpart does not have the proper educational background or capacity for the job), is not motivated to perform the task (the expert because he has no interest in working his way out of the job, the counterpart because his current income is maximized by spending more time at secondary occupations and

FIGURE 8: BANK-FINANCED TECHNICAL ASSISTANCE, TOTAL (1990 US$ MILLION) AND COMPONENTS (PERCENT OF TOTAL), AFRICA AND WORLD

A. AFRICA



B. WORLD



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his future income is maximized by moving to a new job), or does not have the time to devote to the training and learning process because of more pressing operating responsibilities.[4] Training courses and overseas fellowships often prove to be less productive (because of poor or inappropriate training) and more expensive (because students fail to return to the positions for which they were trained) than bargained for.[5]

(3) TA for institution building is working even more poorly, sometimes because of lack of commitment on the part of the recipient, frequently because of failure to understand and to deal with the more fundamental determinants of institutional behavior (bureaucratic procedures, internal politics, pursuit of economic rents, and so on).

(4) TA-funded personnel are expensive—in the range of $10–15,000 per month for an individual expert without organizational overheads and $20–30,000 including overheads. These figures, of course, include housing, transport, family benefits, and so on. But salaries alone are often twice those of comparable jobs with an aid agency such as the Overseas Development Agency and many times more than those of locals with the appropriate training and experience for the job. Training, especially overseas training, is also expensive, particularly because of the high attrition rates: it is not uncommon to find it necessary to train half a dozen persons before one is found who returns to the position for which he was trained. While these expenses are for the most part borne by donors, they use up massive amounts of resources that could be used for other developmental purposes.

(5) In some countries TA appears to be increasing dependency more rapidly than it is increasing capacity, for the following reasons:

- Gap-filling TA allows and encourages expansion of government activities beyond the limits of local capacity; this situation has continued for so long that these expanded activities have become the expected norm.

- Donor activities have increased the demand for consultants (and their wages) far in excess of local supply, thereby increasing dependence on foreign assistance for TA financing.

- To cope with deficiencies in local capacity, donors have traditionally managed more of the aid process themselves—from project identification through implementation—in Africa more than elsewhere. This "supply-driven" character of the process, if anything, has increased over time as evidence of poor results from early projects has accumulated, as aid flows have increased, and as economic conditions deteriorated during the 1980s.[6] It is typical to find that the first education project in a country series is a simple, narrowly focused construction project whereas the last includes hardware, software, policy reforms, and institutional development objectives. While the later projects include more of what is necessary to bring about a lasting improvement in the education system, they require more Bank staff and consultants to develop, supervise, and implement.

- TA is more capable of propping up a flawed institution than it is in reforming the institution so that it works better on its own. The result is to perpetuate dependency on foreign assistance.

Evaluations of Bank operations in this field, while more heavily focused on implementation problems than impacts, are consistent with these findings. A review of project performance ratings for 41 free-standing TA projects completed since 1974 found that 40 percent were rated as unsatisfactory compared to 20 percent in other parts of the world (Annex Table 10). A review of TA components in investment projects by region undertaken by the Technical Assistance Review Task Force gave them a rating for effectiveness (on a three-point scale ranging from negligible to substantial) of 1.5 in Africa, 1.6 in EMENA, 1.8 in LAC and 1.85 in Asia (World Bank, 1991b). Audits reviewing sequences of projects in the same sector frequently find inputs of advisors and training being repeated in project after project, as if previous doses accomplished very little.

## Remedies, Proposed and Tried

Proposed and actual efforts to remedy the situation fall into five categories: (1) improve the processes and procedures by which TA is delivered and managed, (2) use different approaches to transfer knowledge and build capacity, (3) improve the working environment within which TA operates, (4) correct distortions in the markets for higher level personnel, and (5) reduce the need for TA, for example, by reducing government operations, simplifying projects, or using less skill-intensive technologies. Bank analyses, recommendations, and efforts at improvement have focused mainly on the first two of these categories.

### *Improving Processes and Procedures*

It is understandable that Bank reviews of TA focus on recommendations to improve processes and procedures, first, because this is what the Bank has most control over, and second, because practice in this area is believed to be far from the standards the Bank normally sets for itself. PCRs, PARs, sector reviews, and studies for nearly two decades have complained that TA projects and components have been poorly identified, designed, and implemented. Especially in large investment projects, the provision of technical experts and training components are often afterthoughts, added to the SAR in sketchy fashion without much thought to details. Sometimes, difficult institutional problems have been assumed away by adding advisors with a mandate to deal with these problems as part of their job. This neglect during lending and implementation stages often carries over into PCRs and PARs which in the best cases only provide an indication of physical quantities and total costs and hardly ever contain adequate information on unit costs, accomplishments, or what remains to be done.

The relative lack of attention to TA, particularly in project preparation for free-standing technical assistance projects, is reflected in staffweek coefficients for lending operations. As Figure 9 indicates these coefficients have been roughly the same as those used for TA projects in other countries, and lower than for all Bank funded projects in Africa, despite the greater difficulties encountered by these projects. Supervision coefficients have also been lower but have risen over time to the point where there is no longer any difference between these and other projects.

Several reasons are typically given for this situation including: lending pressure, blueprint approach to project preparation, and inadequate recognition of the difficulty of much TA work, hence under-allocation of time and assignment of insufficiently experienced staff. On some of these issues there is considerable evidence. For example, OED's 1990 review of "Free-standing Technical Assistance for Institutional Development in Sub-Saharan Africa" (prepared for internal use) indicates a high correlation between project success and the time and effort devoted to project preparation and design: staffweeks spent on preparation of unsuccessful projects averaged 10.8, while time spent on successful operations averaged 38. One reason the more successful operations took longer is that they involved the recipient in preparation and design to a larger extent, an approach that is bound to lead to a more adequately designed project.

There is considerable consensus within the Bank about what is required to remedy this situation. The following list provides a synthesis of key measures:[7]

- TA should be given more consideration in country strategy papers.
- Assessment of the situation should begin with a clear understanding of the problem and what should be done about it; in many cases this is likely to require a manpower survey as well as an institutional analysis that is broader than the specific project focus.
- A realistic assessment of the borrower's commitment and capacity to put TA funds to proper use is also needed; if found to be inadequate, specific measures to rectify the situation should be undertaken before project initiation, or the project should be dropped if this is not feasible.
- To enhance commitment and ensure a more detailed and realistic project design, borrowers should fully participate in project preparation and design.
- More effort should be devoted to the design stage of TA actions, in particular to specify monitorable objectives; but at the same time, an element of flexibility should be built into the design to deal with changing realities during implementation. Training programs need to be developed with the same rigor and detail as other elements.
- Supervision of TA components and projects needs to be intensified, with more emphasis being placed on substantive issues.
- The selection and performance of consultants and training programs should be more rigorously assessed and monitored.
- The treatment of TA in PCRs and PARs needs substantial improvement.[8]

Some of these recommendations are beginning to appear in practice. A greater number of recent projects include terms of reference and more detailed descriptions of objectives and assignments. More local consultants are being utilized. Staffweeks for supervision have increased, as Figure 9 shows, and Resident Missions are being utilized in the process more effectively. The issuance of a new Operational Directive on TA (O.D. 8.40) and the preparation of a "TA Handbook" to provide guidance to Bank staff on "best practices" should encourage further movement in these directions. But project preparation and design are still weak. Few recent projects include detailed matrixes specifying project activities, timetables, and anticipated outputs, as required since 1987; and interviews with task managers confirm that project-related TA components continue to be treated as afterthoughts during appraisal.[9] Institutional analysis is still neglected in free-standing projects. And Figure 9 confirms that little has changed in terms of staffweeks devoted to these aspects.

### *Alternative Delivery Mechanisms*

For the reasons noted above, there has been growing dissatisfaction with the expert/counterpart model as a means to transfer knowledge and experience. Some have argued that the whole approach is flawed, particularly in the African context.[10] This has led to a number of suggestions for transfer of knowledge and expertise through other means, for example:

- Make greater use of short-term advisors. This approach makes it impossible for the government to utilize the advisor for a line function. If the function is to be performed at all, a local staff member will have to be assigned, in which case learning-by-doing would be maximized.

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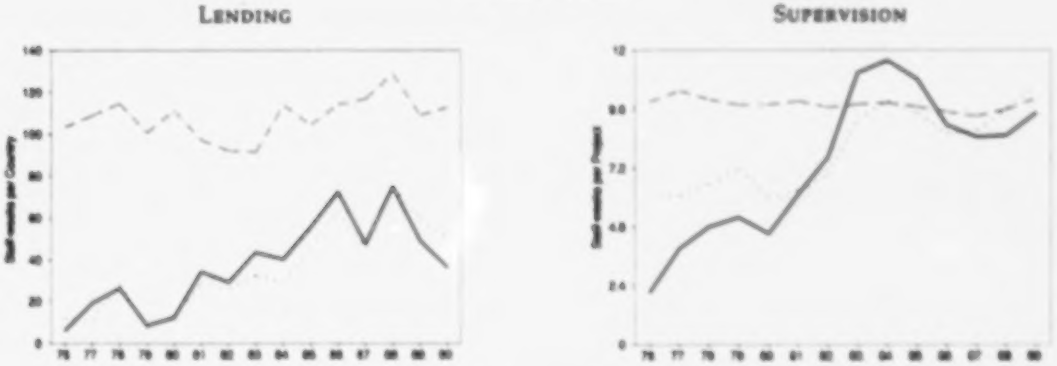
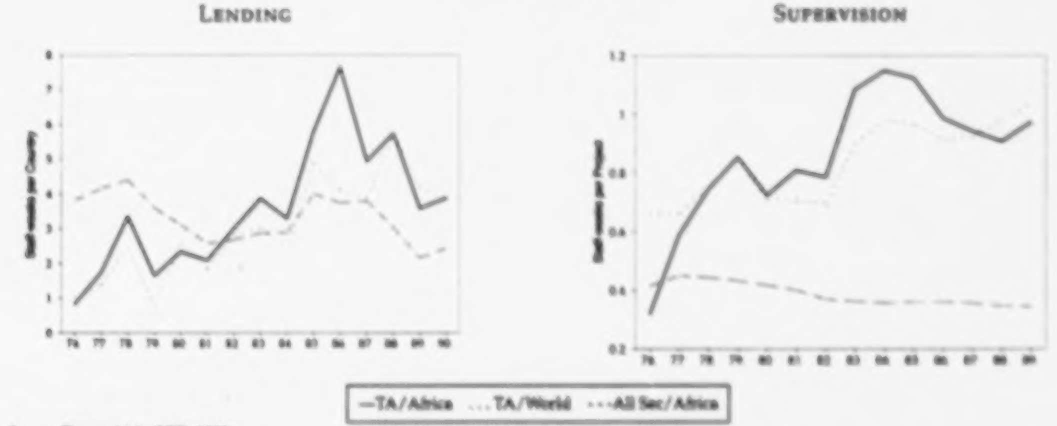
Figure 9: Staff-weeks per Project in Technical Assistance Projects

A. Per Project



B. Per US$ Million



Source: Figure A1.1, OED, 1992.

- When gap-filling professionals are required because of lack of qualified local personnel, the government should consider hiring them for regular line positions, paying them from regular salaries, topped-up if necessary by Bank or donor funds but only for a limited period of time agreed to in advance. This approach has been used in Burundi to good effect for many years. Working in a regular position alongside local staff and without special privileges (other than salary) reduces irritations and ambiguities about the nature and purposes of the assignment. Since the position is funded at its regular level by the government, this approach should encourage more careful consideration of needs and should reduce the recurrent cost problem when Bank or donor funding cease.

- Make greater use of local consultants and researchers. This recommendation has been

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made far more frequently than it has been followed. On the one side, it is clear that it would enhance local capacity on a permanent basis and should substantially reduce costs. On the other, it may result in a lower quality product for a time, may bid local professionals away from higher priority activities (for example, away from permanent government service), and may distort the local salary structure. To minimize these problems requires agreement and collaboration among donors, which has proven difficult to arrange. Unless they are severe, however, these disadvantages are worth tolerating to achieve the greater capacity building this approach should lead to.

- Make greater use of twinning arrangements. The advantages of this approach are numerous and well appreciated. Because the focus is on the institution rather than the individual, there is a greater chance that constraints external to the individual—for example, lack of administrative support—will be identified and treated. This institutional focus also increases the probability that more will be left behind if a key individual leaves. The fact that the two institutions share a set of common experiences and purposes should enhance the value of the experience and may lead to a continuation of the relationship after the TA contract ends. And the arrangement can be applied in a flexible way, involving, as needed, exchange assignments, study tours and the importation of experts even if not identified at the outset. The principal problems with this approach are that it is difficult and time-consuming to arrange, there is a tendency for the "developed" institution to impose its style on the "developing" one even if inappropriate, and it may be considerably more expensive than the typical TA project.[11]

Some of these suggestions are also showing up in recent practice. A review by the Africa Technical Public Sector Management Division, for example, found that five of the 15 free-standing projects approved in FY87 and FY88 incorporated alternative delivery modes such as twinning, periodic short-term visits, and programs to repatriate qualified nationals.[12] There is also evidence that more local consultants are being utilized.[13] There is no evidence, however, that the Bank is trying to discourage use of expatriates in line positions.

### *Improving the Working Environment*

The working environment in all too many government offices in SSA is not conducive to making good use of the TA personnel and training. One or more of the following characteristics is typically present:

- Distorted incentive structures, which manifest themselves in at least two ways: lack of correlation between rewards and performance and, especially during the 1980s in SSA, low, compressed, and deteriorating civil service pay scales relative to the private and international labor markets;[14]

- Shortages of complementary inputs, for example, office equipment and supplies, transportation equipment and petrol, and repair facilities, usually due to inadequate budget allocations for nonsalary inputs; and

- Weak administrative procedures, for example, failure to delegate authority or provide staff with meaningful professional work, lack of accountability, lack of agreed terms of references and consistently applied operating procedures, and hiring persons for reasons other than job-related needs and proven abilities.[15]

In cases where such problems are severe, TA programs cannot operate effectively to improve capacity because the typical civil servant has little incentive to do his job better. The way to maximize current income is to devote as much time as possible to secondary jobs. The way to maximize future income is to move on to another position, either an administration position within one's organization or to a nongovernmental position. As a consequence, while there is considerable interest in acquiring general skills and certificates, there is less interest in the acquisition of specific, job-related skills, no matter which delivery method is utilized. Much of the frustration with the expert/counterpart approach comes from factors such as these, not factors inherent in the approach itself.

The short-run response to these problems by the Bank and other donors has been to shore up the operating budgets of the agencies implementing their projects, for example, by providing these agencies with additional staff in the form of expatriate operations officers, salary supplements to existing staff, and funds for equipment and supplies. This response does help greatly to improve implementation of individual projects. But it has introduced distortions into labor markets and generated perverse expectations and incentives that are destructive to institution building and not sustainable.[16]

The longer-run response, particularly favored by the Bank in recent years, has been to promote civil service and administrative reform programs. Civil service reform programs generally aim to decrease employment and use the budget savings to increase and decompress wages and to improve nonsalary operating budgets. Between 1981 and 1989, the Bank financed 41 projects (structural adjustment loans and free-standing technical assistance operations) with such components in SSA (compared to 20 in all other regions). Recent evaluations suggest that they have had mixed results: while progress was sometimes made in eliminating phantom employees, vacant posts, temporary workers, and various employment guarantee practices, new recruitment often eroded many of these gains. As a consequence, there is often little or no budgetary saving with which to increase salary and nonsalary recurrent budgets. These evaluations seldom discuss the anxieties, deterioration in morale, and work disruptions caused by the retrenchment programs themselves; where they are not offset by improved working conditions, the net effect on productivity could be negative. Administrative reform programs have included a variety of efforts to improve personnel management (improved management information systems and legal frameworks, more regularized and transparent processes for hiring, firing, and promoting, staff training programs) and public expenditure planning and programming procedures. None of the evaluations undertaken to date points to any significant improvements resulting from these efforts;[17] but most of these programs are too new to draw final conclusions about their efficacy.

### *Improving the Market Environment*

As pointed out in Chapter 1, the labor markets for higher level skills sometimes encourage expatriates to be hired in place of Africans and Africans to seek employment outside their national markets. This problem has been largely neglected by the Bank, both in analysis and in practice. What, if anything, can be done to improve the situation?

One obvious place to start is with the Bank guidelines on procurement of TA-funded personnel, which discourages consideration of costs.[18] The guidelines make most sense for large capital investment projects where TA is a small fraction of total costs and where small differences in competence could mean expensive failures, but perhaps not for ID-related TA. This issue needs careful reconsideration.

It might also be useful to require better recording and programming of technical assistance and its full costs, both foreign and domestic. The simple process of laying out and adding up these costs would be sobering and might lead to somewhat more rational decision making. At a minimum, it should help eliminate duplication.

Consideration should also be given to requiring that TA components and projects specify their objective in terms of decreasing the future need for TA—that it identify the specific steps needed to achieve independence and include monitorable goals and timetables for this purpose. Some special institutional arrangements—for example, a central government unit charged with ensuring that this principle is followed—might have to be considered. The procedures used in Botswana might usefully be applied elsewhere (Raphaeli, 1984).

None of these approaches is likely to work well, however, so long as the price distortions remain as great as they are. One way to correct them in the market for expatriates is to require local financial contributions to the full cost of TA projects, as is done with investment projects.[19] Another is to establish a TA fund that pools all donor contributions for this purpose, allow domestic procurement, and give authority to allocate or spend these funds to one central government agency, the goal being to establish and clearly identify a budget ceiling for TA expenditures.[20] Yet another is to provide TA personnel with monetary incentives to achieve their capacity-building goal as rapidly as possible.[21]

Other approaches can be tried as ways to reduce the brain drain. More training can be provided in-country, an approach currently being encouraged in the Bank. Emphasis in training programs can be placed on skills narrowly focused on the needs of the institution whose members are being trained and which do not lead to a degree. Fellowship recipients could be required to sign a contract obligating them to pay for their training either by working in the institution that was supposed to benefit from their training or by a financial payment into a fund that would be used for other fellowship recipients to take their place. Major agencies typically hiring such persons should be asked to cooperate in the enforcement of this contract.

Such methods will not work without the agreement of the governments and their major donors, and even if they agreed each would be tempted to break the agreement to ensure the successful implementation of its projects. For this reason, it may not seem worthwhile to pursue such suggestions. But so long as market incentives remain as they are, the inflow of expatriates and outflow of trained Africans is likely to continue; and improved procedures and delivery modes on the part of the Bank are unlikely to have an appreciable impact.

### *Reducing the Need for Technical Assistance*

Since independence, the need for TA has grown to accommodate the growth in government functions, the growth in foreign assistance, and the character of the investments being made. Dependence on TA and training could be reduced by changes in each of these factors.

### *Magnitude and Complexity of Government Operations*

The number and complexity of government operations could be reduced by eliminating some functions (e.g., giving up price controls), changing the way some functions are accomplished (e.g., regulating imports using tariffs instead of quantitative restrictions), streamlining procedures (e.g., for budgetary expenditures), and privatizing or contracting out some operations. While the Bank has encouraged some of these changes for other reasons, it has not systematically pursued such possibilities with the goal of reducing the human resource cost of doing public business.

The manpower/TA implications of each approach are different. When a function is eliminated, there is a clear reduction in need for trained manpower. When a function is simplified or consolidated, there may be a saving, but there is also likely to be some change in the mix of skills required. The shift from quantitative restrictions to use of tariffs, for example, decreases the need for a large number of inspectors but may increase the need for a few policy analysts, which might temporarily increase the demand for foreign advisors and training. When an operation is transferred from the public to the private sector, however, the short-run effect on need for TA and training may be negligible (actual use of TA may change, however, if the terms of its availability change). The main impact of this transfer will be felt in the long run because the available TA is likely to be used more effectively, with the consequence that local capacity is likely to be created more rapidly.

### *Magnitude and Character of Foreign Assistance*

There is a high correlation between the amount of TA a country receives and the amount of non-TA foreign assistance it receives. Among the SSA countries, for each additional dollar of non-TA official development assistance received, TA grants increase by nearly $0.22.[22] This occurs because the administrative problems for both recipient and donor increase with the amount of assistance received. One way to reduce the dependence on TA, therefore, is simply to slow down the flow of foreign assistance. This is not an unreasonable proposition, at least in countries with an excessively large number of problem projects despite high levels of TA.

A related possibility is to reduce the size and complexity of individual projects. Indeed, the Africa region has recently indicated its intention to scale projects down in these ways so they can be implemented by the borrower's staff without foreign personnel in operating roles. As yet, however, there is no sign that this has happened.[23]

But short of that, the need for TA for any given level of foreign assistance could be reduced by decreasing the number of individual donors and projects a country has to deal with. This could be done by donors' agreeing to collaborate on a few large projects instead of each funding their own smaller project. This approach is being used to good effect in Bangladesh in the population field. It is not common in the education sector of Africa. Indeed, the number of Africa education projects that include cofinancing is low, compared to other sectors and the rest of the world. It seems to be less common in the education field in SSA, at least if judging by the extent of Bank projects that include cofinanciers in SSA compared to the rest of the world.

### *Character of the Development Process in SSA*

A seldom discussed but potentially very important reason for the high level of dependency on expatriate advisors in SSA pertains to the character of the development process in Africa, which has served to create shortages of skilled manpower. As Chapter 1 indicates, this has occurred because of the failure to design projects and development strategies that conserve Africa's scarce factors of production: skilled labor and capital. On the contrary, all major actors seem to have interests in encouraging large, capital-intensive, and therefore, almost always, skill-intensive, investments. A large company requires accountants, lawyers, personnel officers, and skilled managers, to say nothing of the technicians required to handle sophisticated machinery and production procedures, whereas a small firm using less capital-intensive technologies can operate quite effectively with a more modest array of skills. Road maintenance systems need not have been as complex and capital intensive as they have been; they could have been designed around local, small-scale contractors using more labor-intensive and skill-conserving methods, as is often done in Asia. Such skill-conserving methods might not be economical in all fields, even in Africa; but surely, had projects been designed with this goal in mind, demand for such skills, and hence the need for such large numbers of expatriates, would have been substantially less.

A number of factors can be suggested as possible explanations for this situation: the developmental philosophy of the 1960s and 70s that encouraged state ownership and control, and utilization of "modern" (which usually meant large, complex, capital- and skill-intensive) methods of production; the involvement of foreign engineering firms which tend to recommend use of technologies in which they have a financial stake or with which they are familiar; donor governments with an interest in export sales; and multilateral development institutions including the World Bank with an interest in getting on with the job in an efficient manner (i.e., a manner that minimizes time and staff inputs per unit of resources transferred). Given all these interests, it is rare to find a project that is adapted to local skill availabilities. If required skills are not available, it seems to all concerned more appropriate to provide training and to make the project work while the training is taking effect by bringing in foreign operators.

But this is not an inevitable pattern. Skill-conserving methods of production exist and are used to good effect throughout the world. The Bank could play an important role in changing this pattern by demonstrating in the projects it funds just what can be done. It could also do a lot to encourage greater consideration of this point by other donors and the government itself.

## Conclusions

The essence of this discussion is that the poor performance of TA and training efforts in SSA is to a large extent related to the motivations of the various actors. The Bank and other donors have a stronger interest in efficient implementation of their investment projects than in maximizing the learning-by-doing process that would, for a time at least, slow down project implementation even though ultimate performance would improve. Governments are more interested in using expatriates to assist with current operations—particularly when they are available on a grant basis—than they are in utilizing lesser-skilled nationals or in undertaking the kind of reforms that would bring more skilled nationals back to the country or into government service. In the absence of such reforms, civil servants often have more interest in moving out of their current position than they do in improving their job-related productivity. Governments cannot operate effectively in the long run by depending on the few highly competent, dedicated, and selfless persons who are not so motivated. Under these circumstances, simply increasing the quantity and quality, and marginally changing the character, of TA and training inputs, while helpful, is not going to do much to rapidly reduce dependency. Indeed, in some situations such efforts may lead to an increase in dependency.

There is no simple, quick solution to these problems. The optimal package is likely to vary from country to country and include bits and pieces from each of the areas of possible remedies discussed above. On a general level, greater awareness of the high cost and low productivity of existing programs should encourage a broader search for solutions. One way to do this is to begin assessing TA and training efforts in terms of their sustainable impact on local capacity, not in terms of current operations that were completed or numbers of persons trained. It would also help if the Bank and other donors were to 'back off' a bit: to be less quick to step in with TA and training in situations where more fundamental issues have not been addressed; to refrain from taking responsibility for actions that should be the responsibility of government officials; and to make TA and training less of a free good so that it is not undervalued. While the cost of doing so will be failure to meet many deadlines and slower and poorer implementation of projects in the short term, it is a necessary cost to create local capacity.

## Endnotes

1. In 1989, OECD reported "technical cooperation" to be $3.2 billion, about 23 percent of total ODA. This figure, however, is a substantial underestimate in that it includes only free-standing grants by DAC members. It excludes loan-financed technical assistance, technical assistance included as components of other projects, and technical assistance provided by nongovernmental organizations and non-DAC member countries.

2. These figures refer to commitments. Actual disbursements for TA are less because of diversion of funds to other components or TA cancellations.

3. For an interesting classification and discussion of functions served by foreign advisors, see Cohen, 1991.

4. It is a time-consuming process. Little training takes place if the expert and the counterpart divide up responsibilities and go their independent ways or if the expert does the job for the counterpart in order to save time.

5. Indeed, some feel that overseas training should be minimized. An internal memorandum by one of the operating divisions in the Bank's Population and Human Resources Department put the argument as follows. "Sending government personnel abroad to study is rife with problems: too many participants don't come back (or do at first, but then disappear soon thereafter to a new job or a new home); too many of the courses at foreign centers miss the mark (a course that relies on examples from developed countries is not always helpful); and the participants' time abroad creates huge skill gaps at home, usually at just the moment that they are needed most for sector reforms and project implementation. It is better to bring the trainers to the students....Even if this is more costly (often it isn't), the benefit of avoiding the problems of sending nationals abroad is worth it. The forces fueling brain drain are bad enough already—no need to make them worse."

6. These deteriorating conditions have led to the erosion of salary and nonsalary budgets which further reduced administrative capacity and increased incentives to utilize TA personnel in line positions and depend more heavily on Bank and donor staff for project work.

7. This synthesis has been taken from OED, 1990, "Free Standing Technical Assistance for Institutional Development in Sub-Saharan Africa"; TARTF, 1991; Buyck, 1991; and OED, 1991.

8. This recommendation is the least well-developed in various reviews. Because of this some elaboration is useful. What is needed is a description and assessment of what the TA funds were actually spent on—what was actually done or accomplished, what the impacts were, how appropriate the advice and training were, what the studies accomplished, whether the trainees achieved something of value and returned to their posts—the unit costs involved in these different activities, and an indication of what remains to be accomplished in the future. Much of this information could come from the consultants themselves, if they were required to submit substantive completion reports and were interviewed in the course of preparing the PCRs and PARs.

9. Buyck, 1991, p. 18.

10. Fundamentally, the argument is that it is bad personnel practice. If a competent civil servant is not in place already, but is appointed to work with the expert, it is equivalent to appointing someone to a position before he or she has demonstrated competence. A better approach would be to give the expert sole responsibility for the function, making it clear that a subordinate will be appointed to the post as soon as competence has been demonstrated. If a reasonably competent person is already in a position but needs some assistance in improving office practices, an expert could help as an advisor or in a staff position.

11. For a good discussion and review, see Buyck, 1991.

12. Reported in Bucyk, 1991.

13. Sometimes, however, these consultants are simply government officials who have left their posts for more lucrative assignments, not net additions to local human resources working on development problems in the country.

14. According to Cohen, 1991, salaries for economists in the Kenya's Ministry of Planning and National Development are half of what a well-qualified secretary can earn in the private sector and one-fifth the starting salaries for Kenyan professionals in Nairobi's international management consulting firms and donor agencies. Other factors affecting the incentive structure are listed in the previous endnote.

15. Cohen, 1991, summarizes the situation in Kenya's Ministry of Planning and National Development for junior and middle-level officers as follows. (1) Entry pay differs by education grade level and there are few opportunities to overcome this initial handicap. (2) Promotions are excessively slow, requiring additional training which one has to wait in line for and a lot of paperwork which supervisors neglect because of more pressing tasks. (3) Promotions are based on time in grade and perfunctory annual evaluations; merit promotions are not allowed because of concerns about abuse on tribal or other personal grounds. (4) There are few higher posts available to move into because the career ladder has few steps and the career pyramid is very flat. (5) Most junior and middle level professionals are underemployed: months can go by after employment without assignments and when they come they often do not involve meaningful professional work. (6) Initiative is not rewarded; indeed, efforts to work on interesting but unassigned topics can get officers into hot water. (7) Work products are generally uncritically accepted; professional dialogue and critique of each other's work is discouraged. (8) Assistance with career development and mentoring are rare; transfer to other ministries or to the field appear to happen arbitrarily, without reference to skills and experience.

16. Cohen, 1991, is particularly critical of the World Bank for "experiments" such as the Technical Assistance Pool Project and its successor, the Agricultural Structural Adjustment Operations II Project, that pay Kenyan staff to work in various ministries on a long-term basis at salaries in excess of five times the pay earned by comparable government economists. He believes they will have disastrous repercussions on professional morale, work flow (refusal of government economists to work with these privileged

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persons), and institutional capacity building efforts; that they encourage corruption (payments to senior officers to obtain their approval); and that readjustments to a more normal salary structure when these projects end will cause additional problems and pain.

17. Nunberg and Nellis, 1990; De Merode, 1991; World Bank, 1991a.

18. The following quotations from World Bank procurement guidelines are indicative. There is "no requirement for competitive bidding with the award being made to the lowest evaluated bid" (paragraph 2.01). "The competence and experience of the firm and the personnel to be assigned, the quality of the proposal, and the client/consultant relationship are the principal factors in choosing a firm. The proposed financial terms may sometimes be an additional element to be considered" (paragraph 2.01). "While the need to limit costs is recognized, the Bank recommends that the budget amount be set so as to allow all invited firms to submit meaningful technical proposals" (paragraph 2.11).

19. A step in this direction was suggested above in recommending that long-term consultants fill specific line positions paid for out of the regular government budget and topped up using TA funds.

20. See Berg, 1993.

21. An example of where this was done to good effect is a turnkey fertilizer project in Nigeria of about five years ago which included a provision that the contractor would receive approximately 5 percent less if the workforce was not nationalized by a certain date. Robert Klitgaard, 1991, Chapter 7, proposes this and a number of other intriguing ways to correct what he calls the "incentive myopia."

22. The data refer to TA grants and ODA from OECD countries. The least squares equation for 37 observations using 1989 data is $TA = 20.8 + 0.22 * (\text{non-TA ODA})$, R squared = 0.70.

23. Loan sizes in real terms for education, transport, and agricultural projects for Cameroon, Kenya, Malawi, Nigeria, Senegal, and Tanzania were found to be increasing over the whole period from 1963 to 1992. The only exceptions are transport projects in Kenya which decreased in size between 1979 and 1989 and agricultural projects in Nigeria which decreased in size between 1984 and 1992. No study was undertaken of complexity, but there are no obvious signs that it has decreased over time. Indeed, the greater use of sector and adjustment operations and inclusion of policy concerns suggests, if anything, the opposite.

# 5. Conclusions

During the 1960s and early 1970s, significant improvements could be observed in Africa's ability to manage its own affairs, the most obvious manifestation being the replacement of expatriates by nationals in operating positions throughout the economy. During the remainder of the 30-year period under review, this process decelerated and in a few countries may even have reversed directions, if quality as well as localization of services performed is taken into account. Government, Bank, and other donor efforts at HRD in Africa have not been adequate to stem the deterioration that has occurred during the second half of this period. So far as the Bank is concerned, the study suggests three reasons for this: the Bank limited its interventions to education, training, and TA, in the process ignoring the many other factors that influence HRD; until recently, these fields were assigned a secondary role in the Bank's development strategy for the region; and some activities within these fields were less effective than they might have been, and in some respects—in part because of the Bank's style of operations—may have been counterproductive. For most of this 30-year period, the Bank has not behaved as if it believed statements like Eugene Black's (p. 26) that human resource development is a precondition to wise and effective utilization of foreign investments.

Suppose that the Bank decided to act upon President Black's statement. What might it do differently?

First, and foremost, it would make capacity building (both human and institutional development) the central objective of all its activities in Africa and would search for monitorable indicators of progress by which to judge whether, in each of its operations, this objective was being achieved. If, for example, a project succeeded in raising crop yields but did not leave behind an improved capacity to continue progress into the future, it would be given something less than a satisfactory rating. One of the monitorable indicators of improved capacity would be the replacement of TA personnel in operational roles with local personnel of comparable quality. The dimensions of sustainability concerned with institutional capacity would become more important in judging projects. The general principles embodied in the Africa Capacity Building Initiative (currently focused on development of economic management) would be generalized.

Second, it would step back periodically and consider all of a country's priority human resource needs, all the ways those needs might be met, and, sector by sector, what might be done to improve the situation both on the demand and the supply sides of the situation. Ideally, this would be based on a broad, intersectoral strategy for HRD developed by country experts in each country, with inputs from all stakeholders and funding agencies. In addition to the issues discussed in a typical education sector review, such a study would consider, among other things, how the country's development strategy, organizational arrangements, technological choices, and labor markets influence both the demand and supply sides of the human resource situation. All the issues raised in Chapter 1 would be covered, albeit in more operationally relevant detail. Some that were not covered—for example the role that the private sector could play in educational development and synergies between health and educational development—would also be considered.[1]

Third, new types of programs, projects, and funding arrangements are likely to emerge. For example:

- It is likely to encourage the search for more sustained means of financing these strategies than currently exists through use of individual stand-alone projects of limited duration. The funding arrangement developed for the African Capacity Building Fund is a promising example of what might be done.

- It could result in new policy initiatives, for example, concerted attempts to correct price distortions in labor markets for higher level skills, intensified efforts to promote entrepreneurial development by encouraging small-scale enterprise development building upon existing intermediate technologies and skill levels, and greater utilization of the private sector for the delivery of educational, training, and research services.

- Within the education sector, it is likely to encourage three shifts in emphasis:

  Increased concern for balanced, integrated development of the sector. This is likely to mean more use of program loans and in some cases more focus on higher education with the specific purpose of developing and retaining skilled nationals required to reduce dependence on foreign experts in operating roles.

  Greater efforts to find cost-effective approaches to provide the large—and in most countries still growing—number of persons unlikely to receive much education through the traditional classroom route with something of social and productive value. This might include greater use of distance education approaches and intersectoral projects that combine income-generating activities with educational programs for adults, perhaps along the lines of the learning fund used in Indonesia or the social investment funds operating, among other places, in Bolivia and Guinea-Bissau.

  More use of funding mechanisms that reward excellence: competitive funding arrangements for educational and research institutions that would incorporate principles similar to those used in social funds, and/or stipends, vouchers, or capitation fees that make school budgets more dependent on parents' perceptions of performance, and, of course, achievement scholarships for students.

Fourth, some Bank procedures and styles of operation would change. Given the absence of blueprints for HRD projects and components, the Bank would use more staff in the field and give them more authority, would encourage staff and TA personnel to play a more facilitating and advisory role, and discourage them from doing things for the borrower that result in less ownership and capacity building. For example, it would encourage the design, implementation, and scheduling of projects around existing borrower line capabilities, phasing out free-standing project implementation units staffed by expatriates, would review proposals for TA more critically to ensure that they focused on capacity building,[2] and would relax lending pressures and time schedules to be consistent with this approach. In some countries, it might decide to make progress in capacity building a determinant of the size of its total lending program. In recent years, scattered evidence of similar approaches can be found throughout Africa; they need to be encouraged and expanded.

Fifth, the Bank would take project assessment, supervision, monitoring, and evaluation of education and TA projects far more seriously. To treat these issues as cavalierly as the Bank has done through much of the period reviewed has sent the wrong signals to both Bank staff and borrowers about the purpose and importance of these projects. The actions initiated by the Portfolio Management Task Force should help considerably to encourage movements in this direction. The need to do so is particularly great in areas associated with HRD in Africa. At a minimum, projects would be derived from an overall strategy of human resource development and justified in terms of that strategy, monitorable indicators of progress would be identified, and both baseline and end-of-project evaluation surveys would become routine. Eventually, some form of benefit-cost analysis, or at least cost-effectiveness analysis, would be applied so that the development impact of these projects can be assessed.

No one would argue that these changes, even if implemented zealously and with the cooperation of other donors, would by themselves result in the kind of progress in human resource development everyone wishes for Africa. There are too many other factors over which no one, let alone an external agency like the Bank, has much control. At a minimum, however, they should facilitate progress by clarifying goals, eliminating mixed signals, and suggesting alternative, hopefully more effective, solutions.

## Endnotes

1. The few "human resource sector" reviews that the Bank has undertaken in recent years differ from what is suggested here. Their focus has been on reviews of the social sectors in which the Bank has lending operations—education, population, health, and nutrition—not on capacity building across the board.

2. For example, proposals for external TA might be required to review the extent to which TA has been provided for similar purposes (by the Bank or other donors) in the past, the reasons why additional TA is required (including a review of availability of domestic talent), and the measures proposed to eliminate future dependence on external experts.

# Annexes

Table 1 Trends in Female Educational Attainment for 29 Sub-Saharan Countries and 83 Developing Countries
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## Annex Table 1: Trends in Female Educational Attainment for 29 Sub-Saharan Countries and 83 Developing Countries

| Region/ Group Year | Pop. over 25 (m) | Percent of Population over 25 by Level of Schooling | | | | | | | Avg. Years of School | Gender Ratio[a] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | No Schooling | Primary | | Secondary | | Higher | | | |
| | | | Total | (Complete) | Total | (Complete) | Total | (Complete) | | |
| *Sub-Saharan Africa (29)* | | | | | | | | | | |
| 1960 | 25 | 78.4 | 16.8 | (5.1) | 4.6 | (1.2) | 0.2 | (0.2) | 1.21 | 60.3 |
| 1965 | 28 | 78.3 | 16.9 | (3.1) | 4.6 | (1.1) | 0.6 | (0.3) | 1.15 | 53.9 |
| 1970 | 31 | 77.4 | 17.0 | (3.1) | 5.0 | (1.1) | 1.0 | (0.5) | 1.22 | 52.0 |
| 1975 | 35 | 73.9 | 20.2 | (2.5) | 5.3 | (1.0) | 0.9 | (0.5) | 1.32 | 51.7 |
| 1980 | 40 | 68.5 | 25.1 | (2.3) | 5.8 | (0.9) | 0.9 | (0.5) | 1.52 | 53.7 |
| 1985 | 46 | 64.0 | 28.7 | (2.2) | 6.8 | (0.9) | 1.0 | (0.4) | 1.72 | 54.7 |
| *Developing Countries (83)* | | | | | | | | | | |
| 1960 | 240 | 78.6 | 18.0 | (5.8) | 3.1 | (1.2) | 0.4 | (0.3) | 1.13 | 50.2 |
| 1965 | 269 | 76.0 | 19.8 | (6.5) | 3.6 | (1.4) | 0.6 | (0.4) | 1.29 | 49.8 |
| 1970 | 302 | 72.8 | 21.9 | (7.5) | 4.4 | (1.7) | 0.8 | (0.6) | 1.51 | 49.8 |
| 1975 | 340 | 68.8 | 24.0 | (6.8) | 5.8 | (2.3) | 1.4 | (0.9) | 1.78 | 52.5 |
| 1980 | 389 | 64.9 | 24.9 | (6.7) | 8.3 | (3.2) | 2.0 | (1.3) | 2.16 | 55.1 |
| 1985 | 451 | 59.6 | 28.2 | (8.3) | 10.0 | (4.1) | 2.9 | (1.9) | 2.65 | 58.7 |

a. Gender ratio is the ratio of female to male average years of schooling multiplied by 100.

*Source:* Barro and Lee, 1993.

## ANNEX TABLE 2: TRENDS IN EDUCATIONAL ATTAINMENT FOR SELECTED AFRICAN COUNTRIES

| | | | *Highest Level Attained (Percentage of the population aged 25 and over)* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | *Population* | | | | *Second Level* | | | | *Average* |
| *Region/* | | *≥ 25* | *No* | *First Level* | | | *(2nd* | *Higher Level* | | *Years of* |
| *Country* | *Year* | *(1000s)* | *Schooling* | *Total* | *(Complete)* | *Total* | *Cycle)* | *Total* | *(Complete)* | *Schooling* |
| **Benin** | 60 | 939 | 99.3 | 0.1 | (0.0) | 0.7 | (0.2) | 0.0 | (0.0) | 0.08 |
| | 65 | 970 | 99.3 | 0.1 | (0.0) | 0.7 | (0.2) | 0.0 | (0.0) | 0.08 |
| | 70 | 1,031 | 99.2 | 0.1 | (0.0) | 0.8 | (0.2) | 0.0 | (0.0) | 0.09 |
| | 75 | 1,124 | 94.7 | 3.4 | (0.9) | 1.7 | (0.6) | 0.2 | (0.1) | 0.37 |
| | 80* | 1,245 | 89.2 | 8.3. | (2.3) | 2.2 | (0.8) | 0.3 | (0.2) | 0.66 |
| | 85 | 1,401 | 84.2 | 12.0 | (3.3) | 3.2 | (0.9) | 0.6 | (0.4) | 0.98 |
| **Botswana** | 60 | 157 | 74.6 | 22.8 | (5.7) | 2.3 | (0.6) | 0.2 | (0.2) | 1.27 |
| | 65* | 174 | 72.7 | 24.6 | (5.1) | 2.4 | (0.6) | 0.2 | (0.2) | 1.32 |
| | 70* | 188 | 70.5 | 26.4 | (2.1) | 2.4 | (0.6) | 0.6 | (0.5) | 1.34 |
| | 75 | 227 | 64.7 | 31.7 | (9.1) | 3.1 | (1.0) | 0.5 | (0.4) | 1.83 |
| | 80* | 309 | 54.7 | 40.5 | (9.4) | 4.4 | (1.3) | 0.5 | (0.4) | 2.29 |
| | 85 | 357 | 50.6 | 42.3 | (9.1) | 6.5 | (1.5) | 0.7 | (0.5) | 2.59 |
| **Cameroon** | 60 | 2,193 | 93.5 | 0.3 | (0.0) | 5.9 | (1.6) | 0.3 | (0.2) | 0.69 |
| | 65 | 2,399 | 90.0 | 4.8 | (1.3) | 5.0 | (1.4) | 0.2 | (0.2) | 0.76 |
| | 70 | 2,639 | 84.9 | 10.5 | (2.9) | 4.4 | (1.2) | 0.3 | (0.2) | 0.92 |
| | 75* | 2,917 | 75.8 | 19.5 | (5.3) | 4.4 | (1.2) | 0.3 | (0.2) | 1.27 |
| | 80 | 3,249 | 63.0 | 31.8 | (8.7) | 4.6 | (1.3) | 0.5 | (0.3) | 1.80 |
| | 85 | 3,642 | 53.4 | 40.0 | (10.9) | 5.9 | (1.6) | 0.7 | (0.5) | 2.28 |
| **Central African Republic** | 60 | 674 | 98.6 | 0.1 | (0.0) | 1.5 | (0.4) | 0.0 | (0.0) | 0.18 |
| | 65 | 722 | 97.0 | 1.4 | (0.4) | 1.5 | (0.4) | 0.3 | (0.2) | 0.26 |
| | 70 | 776 | 94.4 | 4.1 | (1.1) | 1.4 | (0.4) | 0.2 | (0.2) | 0.35 |
| | 75* | 840 | 89.9 | 8.5 | (2.3) | 1.5 | (0.4) | 0.2 | (0.2) | 0.52 |
| | 80 | 928 | 81.4 | 16.6 | (4.5) | 1.9 | (0.5) | 0.2 | (0.2) | 0.88 |
| | 85 | 1,031 | 73.0 | 23.9 | (6.5) | 2.9 | (0.8) | 0.4 | (0.3) | 1.28 |
| **Congo** | 60 | 399 | 95.8 | 0.1 | (0.0) | 4.2 | (1.2) | 0.0 | (0.0) | 0.46 |
| | 65 | 440 | 96.4 | 0.1 | (0.0) | 3.6 | (1.0) | 0.0 | (0.0) | 0.39 |
| | 70 | 488 | 96.8 | 0.1 | (0.0) | 3.2 | (0.9) | 0.0 | (0.0) | 0.35 |
| | 75 | 543 | 89.8 | 1.3 | (0.4) | 6.7 | (1.8) | 2.3 | (1.8) | 1.15 |
| | 80 | 612 | 72.7 | 16.2 | (4.4) | 8.6 | (2.4) | 1.4 | (1.9) | 1.95 |
| | 85* | 694 | 58.7 | 21.4 | (5.8) | 16.9 | (4.7) | 3.0 | (2.3) | 3.14 |
| **Gambia** | 60 | 146 | 98.4 | 0.1 | (0.0) | 1.8 | (0.5) | 0.0 | (0.0) | 0.21 |
| | 65 | 166 | 97.9 | 0.1 | (0.0) | 2.2 | (0.6) | 0.0 | (0.0) | 0.26 |
| | 70 | 192 | 96.5 | 0.2 | (0.0) | 3.0 | (0.8) | 0.2 | (0.1) | 0.40 |
| | 75* | 221 | 94.9 | 1.3 | (0.5) | 3.6 | (1.0) | 0.2 | (0.2) | 0.50 |

*(continued)*

*(Annex Table 2 continued)*

| *Region/ Country* | *Year* | *Population ≥ 25 (1000s)* | *Highest Level Attained (Percentage of the population aged 25 and over)* | | | | | | | *Average Years of Schooling* |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | *No Schooling* | *First Level* | | *Second Level* | | *Higher Level* | | |
| | | | | *Total* | *(Complete)* | *Total* | *(2nd Cycle)* | *Total* | *(Complete)* | |
| | 80 | 255 | 92.0 | 3.6 | (1.0) | 4.2 | (1.2) | 0.2 | (0.1) | 0.65 |
| | 85 | 289 | 89.0 | 5.5 | (1.3) | 5.3 | (1.5) | 0.1 | (0.1) | 0.84 |
| Ghana | 50* | 1,751 | 95.9 | — | (—) | — | (—) | — | (—) | — |
| | 60* | 2,406 | 86.2 | 12.1 | (3.3) | 1.1 | (0.3) | 0.7 | (0.5) | 0.70 |
| | 65 | 2,768 | 82.2 | 11.3 | (3.1) | 6.0 | (1.3) | 0.6 | (0.4) | 1.18 |
| | 70* | 3,042 | 77.7 | 5.8 | (1.6) | 16.1 | (3.3) | 0.4 | (0.3) | 2.03 |
| | 75 | 3,474 | 74.5 | 9.8 | (2.7) | 15.3 | (2.6) | 0.5 | (0.4) | 2.09 |
| | 80 | 3,816 | 65.5 | 19.1 | (5.2) | 14.8 | (2.2) | 0.6 | (0.5) | 2.40 |
| | 85 | 4,559 | 59.3 | 20.8 | (5.7) | 19.2 | (2.5) | 0.8 | (0.6) | 2.94 |
| Guinea-Bissau | 60 | 241 | 99.8 | 0.1 | (0.0) | 0.1 | (0.0) | 0.1 | (0.1) | 0.03 |
| | 65 | 236 | 99.8 | 0.2 | (0.0) | 0.1 | (0.0) | 0.0 | (0.0) | 0.02 |
| | 70 | 232 | 98.2 | 1.8 | (0.4) | 0.1 | (0.0) | 0.0 | (0.0) | 0.05 |
| | 75 | 277 | 94.4 | 5.7 | (1.1) | 0.1 | (0.0) | 0.0 | (0.0) | 0.15 |
| | 80* | 343 | 91.1 | 8.0 | (0.5) | 0.8 | (0.2) | 0.1 | (0.0) | 0.26 |
| | 85 | 369 | 86.0 | 12.8 | (1.9) | 1.2 | (0.2) | 0.0 | (0.0) | 0.42 |
| Kenya | 60* | 3,215 | 77.3 | 20.4 | (5.6) | 2.0 | (0.6) | 0.3 | (0.2) | 1.19 |
| | 65 | 3,556 | 77.1 | 20.6 | (5.6) | 1.9 | (0.5) | 0.4 | (0.3) | 1.21 |
| | 70* | 3,897 | 75.9 | 20.5 | (5.6) | 2.6 | (0.7) | 1.0 | (0.8) | 1.38 |
| | 75 | 4,437 | 69.6 | 26.4 | (7.2) | 2.9 | (0.8) | 1.2 | (0.9) | 1.70 |
| | 80* | 5,202 | 58.6 | 32.2 | (8.8) | 6.0 | (1.7) | 3.2 | (2.5) | 2.66 |
| | 85 | 6,179 | 56.0 | 36.0 | (9.8) | 6.3 | (1.7) | 1.6 | (1.3) | 2.60 |
| Lesotho | 60 | 351 | 46.5 | 52.0 | (14.2) | 1.4 | (0.4) | 0.0 | (0.0) | 2.48 |
| | 65* | 389 | 41.1 | 57.2 | (14.9) | 1.6 | (0.4) | 0.1 | (0.1) | 2.71 |
| | 70 | 428 | 37.8 | 59.6 | (13.8) | 2.6 | (0.7) | 0.1 | (0.1) | 2.86 |
| | 75* | 475 | 34.3 | 61.1 | (9.1) | 4.6 | (1.3) | 0.1 | (0.1) | 2.96 |
| | 80 | 530 | 29.2 | 65.8 | (12.0) | 4.9 | (1.4) | 0.2 | (0.2) | 3.27 |
| | 85 | 600 | 26.2 | 67.3 | (13.2) | 6.1 | (1.7) | 0.5 | (0.5) | 3.54 |
| Liberia | 60* | 413 | 92.3 | 5.0 | (2.9) | 1.7 | (0.6) | 1.0 | (0.7) | 0.56 |
| | 65 | 473 | 89.9 | 6.2 | (2.0) | 2.9 | (1.1) | 1.1 | (0.8) | 0.70 |
| | 70 | 540 | 87.2 | 7.6 | (2.5) | 4.0 | (1.7) | 1.1 | (0.8) | 0.89 |
| | 75* | 618 | 87.1 | 3.8 | (1.2) | 7.5 | (3.9) | 1.5 | (1.1) | 1.17 |
| | 80 | 701 | 82.0 | 8.7 | (2.2) | 7.6 | (3.0) | 1.6 | (1.1) | 1.34 |
| | 85 | 804 | 74.8 | 14.5 | (3.2) | 9.0 | (2.7) | 1.7 | (1.2) | 1.68 |

| Region/ Country | Year | Population ≥ 25 (1000s) | No Schooling | First Level Total | First Level (Complete) | Second Level Total | Second Level (2nd Cycle) | Higher Level Total | Higher Level (Complete) | Average Years of Schooling |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Highest Level Attained (Percentage of the population aged 25 and over) | | | | | | | |
| Malawi | 60 | 1,237 | 68.7 | 30.9 | (8.4) | 0.4 | (0.1) | 0.0 | (0.0) | 1.61 |
| | 65* | 1,382 | 67.5 | 32.1 | (8.2) | 0.4 | (0.1) | 0.0 | (0.0) | 1.66 |
| | 70 | 1,557 | 63.6 | 35.3 | (7.7) | 1.1 | (0.4) | 0.0 | (0.0) | 1.85 |
| | 75* | 1,800 | 55.4 | 42.0 | (4.7) | 2.5 | (1.0) | 0.2 | (0.2) | 2.19 |
| | 80 | 2,099 | 55.5 | 41.9 | (7.1) | 2.4 | (0.7) | 0.3 | (0.3) | 2.27 |
| | 85 | 2,440 | 55.4 | 41.7 | (8.0) | 2.6 | (0.6) | 0.4 | (0.4) | 2.33 |
| Mali | 60 | 1,599 | 98.8 | 1.3 | (0.3) | 0.1 | (0.0) | 0.1 | (0.0) | 0.10 |
| | 65 | 1,785 | 97.8 | 2.2 | (0.6) | 0.1 | (0.0) | 0.1 | (0.0) | 0.15 |
| | 70 | 1,949 | 96.7 | 3.2 | (0.8) | 0.1 | (0.0) | 0.1 | (0.1) | 0.21 |
| | 75* | 2,152 | 95.4 | 3.8 | (0.8) | 0.6 | (0.2) | 0.2 | (0.2) | 0.30 |
| | 80 | 2,328 | 91.4 | 6.9 | (1.4) | 1.4 | (0.4) | 0.3 | (0.2) | 0.57 |
| | 85 | 2,674 | 88.6 | 8.6 | (1.8) | 2.5 | (0.7) | 0.3 | (0.2) | 0.79 |
| Mauritius | 50* | 176 | 51.7 | 42.2 | (11.5) | 5.7 | (1.6) | 0.4 | (0.2) | 2.19 |
| | 60* | 228 | 47.6 | 44.4 | (10.3) | 6.7 | (1.9) | 1.3 | (0.5) | 2.44 |
| | 65 | 260 | 41.1 | 48.8 | (16.6) | 8.8 | (2.4) | 1.2 | (0.5) | 2.94 |
| | 70* | 300 | 36.0 | 50.9 | (18.3) | 11.9 | (3.3) | 1.2 | (0.5) | 3.34 |
| | 75 | 354 | 29.6 | 52.9 | (14.0) | 15.4 | (4.3) | 2.0 | (0.9) | 3.71 |
| | 80* | 354 | 23.9 | 52.0 | (11.8) | 20.6 | (5.7) | 3.6 | (1.5) | 4.31 |
| | 85 | 473 | 20.2 | 52.6 | (11.2) | 24.2 | (6.7) | 3.1 | (1.3) | 4.56 |
| Mozambique | 60 | 2,963 | 58.8 | 41.3 | (11.4) | 0.1 | (0.0) | 0.0 | (0.0) | 1.06 |
| | 65 | 3,287 | 62.2 | 37.9 | (10.1) | 0.1 | (0.0) | 0.0 | (0.0) | 0.97 |
| | 70 | 3,651 | 62.7 | 37.3 | (9.3) | 0.1 | (0.0) | 0.0 | (0.0) | 0.94 |
| | 75 | 4,010 | 61.0 | 39.1 | (7.6) | 0.1 | (0.0) | 0.0 | (0.0) | 0.94 |
| | 80* | 4,577 | 61.5 | 37.9 | (2.0) | 0.6 | (0.1) | 0.1 | (0.0) | 0.86 |
| | 85 | 5,122 | 59.9 | 39.1 | (5.7) | 1.0 | (0.2) | 0.1 | (0.0) | 0.99 |
| Namibia | 60* | 322 | — | — | (18.2) | 12.8 | (3.5) | 2.1 | (1.6) | |
| Niger | 60 | 1,095 | 80.5 | 17.7 | (4.8) | 1.4 | (0.4) | 0.2 | (0.2) | 0.86 |
| | 65 | 1,308 | 84.0 | 14.5 | (4.0) | 1.1 | (0.3) | 0.2 | (0.1) | 0.70 |
| | 70 | 1,463 | 86.9 | 11.9 | (3.2) | 1.0 | (0.3) | 0.1 | (0.1) | 0.58 |
| | 75* | 1,650 | 88.5 | 10.3 | (2.8) | 1.0 | (0.3) | 0.1 | (0.0) | 0.52 |
| | 80 | 1,914 | 88.6 | 10.2 | (2.8) | 1.0 | (0.3) | 0.1 | (0.0) | 0.51 |
| | 85 | 2,240 | 88.1 | 10.6 | (2.9) | 1.1 | (0.3) | 0.1 | (0.1) | 0.55 |

*(continued)*

*(Annex Table 2 continued)*

| Region/ Country | Year | Population ≥ 25 (1000s) | Highest Level Attained (Percentage of the population aged 25 and over) No Schooling | First Level | | Second Level | | Higher Level | | Average Years of Schooling |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Total | (Complete) | Total | (2nd Cycle) | Total | (Complete) | |
| Reunion | 55* | 114 | 57.5 | — | (—) | — | (—) | — | (—) | |
| | 60 | 128 | 52.0 | 40.3 | (11.2) | 7.6 | (2.4) | 0.2 | (0.2) | 2.07 |
| | 65* | 145 | 46.5 | 45.4 | (12.4) | 7.6 | (2.6) | 0.5 | (0.4) | 2.28 |
| | 70 | 162 | 43.0 | 49.1 | (11.3) | 7.2 | (1.9) | 0.7 | (0.5) | 2.32 |
| | 75 | 186 | 37.7 | 50.6 | (10.9) | 10.9 | (2.3) | 0.9 | (0.7) | 2.72 |
| | 80 | 195 | 30.9 | 52.1 | (10.9) | 15.9 | (2.8) | 1.1 | (0.9) | 3.26 |
| | 85 | 227 | 24.1 | 50.1 | (10.3) | 24.4 | (3.7) | 1.4 | (1.1) | 4.04 |
| Rwanda | 60 | 972 | 98.7 | 0.1 | (0.0) | 1.4 | (0.4) | 0.0 | (0.0) | 0.14 |
| | 65 | 1,116 | 98.9 | 0.1 | (0.0) | 1.2 | (0.3) | 0.0 | (0.0) | 0.12 |
| | 70 | 1,289 | 93.2 | 4.5 | (1.2) | 2.1 | (0.6) | 0.3 | (0.3) | 0.43 |
| | 75 | 1,486 | 84.4 | 13.4 | (3.3) | 2.1 | (0.6) | 0.3 | (0.3) | 0.75 |
| | 80* | 1,692 | 77.0 | 20.8 | (4.0) | 2.0 | (0.6) | 0.3 | (0.3) | 0.99 |
| | 85 | 1,956 | 67.6 | 30.2 | (6.0) | 1.9 | (0.5) | 0.3 | (0.3) | 1.33 |
| Senegal | 60 | 1,219 | 32.5 | 65.4 | (17.8) | 1.7 | (0.5) | 0.6 | (0.5) | 2.78 |
| | 65 | 1,361 | 43.8 | 54.0 | (14.7) | 1.7 | (0.5) | 0.6 | (0.5) | 2.34 |
| | 70 | 1,533 | 51.9 | 45.8 | (12.5) | 1.8 | (0.5) | 0.7 | (0.5) | 2.05 |
| | 75* | 1,739 | 56.0 | 40.8 | (11.1) | 2.5 | (0.7) | 0.8 | (0.6) | 1.96 |
| | 80 | 1,979 | 56.8 | 38.6 | (10.5) | 3.6 | (1.0) | 1.0 | (0.8) | 2.04 |
| | 85 | 2,269 | 57.3 | 37.0 | (10.1) | 4.4 | (1.2) | 1.4 | (1.1) | 2.12 |
| Seychelles | 60* | — | 41.7 | 52.1 | (29.5) | 5.5 | (1.9) | 0.7 | (0.5) | 3.11 |
| | 70* | — | 28.3 | 56.0 | (21.5) | 13.2 | (5.9) | 2.6 | (2.0) | 4.09 |
| Sierra Leone | 60* | 924 | 94.4 | 3.3 | (2.9) | 2.0 | (0.9) | 0.3 | (0.2) | 0.53 |
| | 65 | 990 | 91.0 | 5.8 | (2.7) | 2.9 | (1.0) | 0.3 | (0.3) | 0.73 |
| | 70 | 1,062 | 87.4 | 8.4 | (2.6) | 3.8 | (1.0) | 0.4 | (0.3) | 0.93 |
| | 75* | 1,148 | 79.2 | 13.7 | (3.3) | 6.7 | (1.4) | 0.5 | (0.4) | 1.52 |
| | 80 | 1,253 | 77.6 | 15.1 | (3.3) | 6.8 | (1.2) | 0.5 | (0.4) | 1.58 |
| | 85 | 1,383 | 75.4 | 16.6 | (3.5) | 7.5 | (1.1) | 0.6 | (0.4) | 1.72 |
| Sudan | 55* | 3,755 | 91.2 | 8.0 | (1.9) | 0.6 | (0.3) | 0.0 | (0.0) | 0.27 |
| | 60 | 4,096 | 90.3 | 9.0 | (1.9) | 0.5 | (0.1) | 0.0 | (0.0) | 0.27 |
| | 65 | 4,517 | 89.5 | 9.8 | (2.1) | 0.5 | (0.1) | 0.1 | (0.0) | 0.30 |
| | 70 | 5,056 | 88.6 | 10.3 | (2.1) | 0.8 | (0.2) | 0.2 | (0.2) | 0.36 |
| | 75 | 5,840 | 85.8 | 12.5 | (2.6) | 1.2 | (0.3) | 0.4 | (0.3) | 0.48 |
| | 80 | 6,763 | 82.8 | 14.4 | (2.9) | 2.1 | (0.6) | 0.6 | (0.5) | 0.64 |
| | 85 | 7,873 | 78.6 | 16.3 | (3.3) | 4.1 | (1.1) | 0.9 | (0.7) | 0.91 |

| Region/ Country | Year | Population ≥ 25 (1000s) | No Schooling | First Level Total | First Level (Complete) | Second Level Total | Second Level (2nd Cycle) | Higher Level Total | Higher Level (Complete) | Average Years of Schooling |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | *Highest Level Attained (Percentage of the population aged 25 and over)* | | | | | | | |
| Swaziland | 60 | 122 | 73.9 | 20.0 | (5.4) | 5.3 | (1.4) | 0.8 | (0.6) | 1.70 |
| | 65* | 137 | 73.1 | 20.9 | (5.3) | 4.6 | (1.2) | 0.4 | (0.3) | 1.59 |
| | 70 | 153 | 66.9 | 26.7 | (8.1) | 5.4 | (1.1) | 1.1 | (0.8) | 2.12 |
| | 75* | 171 | 53.6 | 34.6 | (9.2) | 8.3 | (0.4) | 3.5 | (2.7) | 3.03 |
| | 80 | 199 | 49.4 | 40.0 | (9.1) | 8.5 | (1.3) | 2.0 | (1.6) | 3.16 |
| | 85 | 229 | 42.0 | 43.1 | (9.2) | 12.5 | (1.7) | 2.4 | (1.9) | 3.75 |
| Tanzania | 60 | 3,449 | 14.0 | 81.0 | (22.5) | 1.3 | (0.3) | 3.7 | (2.9) | 4.39 |
| | 65 | 3,964 | 26.7 | 69.0 | (18.9) | 1.2 | (0.2) | 2.9 | (2.3) | 3.69 |
| | 70 | 4,609 | 36.5 | 59.8 | (15.8) | 1.3 | (0.2) | 2.3 | (1.8) | 3.17 |
| | 75 | 5,404 | 43.8 | 52.9 | (12.7) | 1.4 | (0.2) | 1.8 | (1.4) | 2.76 |
| | 80* | 6,229 | 48.6 | 48.1 | (8.7) | 1.7 | (0.1) | 1.5 | (1.2) | 2.43 |
| | 85 | 7,424 | 52.2 | 44.5 | (8.6) | 1.9 | (0.1) | 1.3 | (1.0) | 2.28 |
| Togo | 60 | 591 | 98.2 | 0.9 | (0.3) | 0.6 | (0.1) | 0.1 | (0.1) | 0.12 |
| | 65 | 626 | 94.3 | 4.8 | (1.5) | 0.7 | (0.2) | 0.1 | (0.0) | 0.28 |
| | 70* | 765 | 89.8 | 9.1 | (3.3) | 0.9 | (0.2) | 0.1 | (0.0) | 0.48 |
| | 75 | 852 | 83.2 | 12.7 | (3.4) | 3.5 | (0.6) | 0.5 | (0.4) | 0.94 |
| | 80* | 962 | 76.5 | 13.5 | (3.1) | 8.7 | (1.4) | 1.3 | (1.0) | 1.62 |
| | 85 | 1,099 | 67.2 | 21.0 | (4.5) | 10.3 | (1.4) | 1.5 | (1.2) | 2.08 |
| Uganda | 60* | 2,327 | 74.9 | 21.3 | (5.8) | 3.8 | (1.1) | 0.0 | (0.0) | 1.15 |
| | 65 | 2,774 | 73.8 | 23.0 | (5.5) | 3.2 | (0.7) | 0.0 | (0.0) | 1.14 |
| | 70* | 3,344 | 71.8 | 26.5 | (3.0) | 1.8 | (0.1) | 0.1 | (0.0) | 1.05 |
| | 75 | 3,759 | 67.5 | 30.4 | (5.1) | 2.2 | (0.1) | 0.2 | (0.1) | 1.27 |
| | 80 | 4,364 | 60.1 | 37.3 | (7.1) | 2.4 | (0.2) | 0.3 | (0.2) | 1.57 |
| | 85 | 5,085 | 60.5 | 37.6 | (7.3) | 2.7 | (0.2) | 0.3 | (0.3) | 1.58 |
| Zaire | 55* | 5,033 | 89.0 | 10.3 | (1.1) | 0.7 | (0.2) | 0.0 | (0.0) | 0.41 |
| | 60 | 5,633 | 83.6 | 15.6 | (2.6) | 0.8 | (0.2) | 0.0 | (0.0) | 0.62 |
| | 65 | 6,370 | 78.0 | 21.0 | (4.0) | 1.0 | (0.3) | 0.0 | (0.0) | 0.84 |
| | 70 | 7,249 | 72.1 | 26.5 | (5.3) | 1.3 | (0.4) | 0.0 | (0.0) | 1.09 |
| | 75 | 8,291 | 65.6 | 32.3 | (6.5) | 1.9 | (0.5) | 0.2 | (0.1) | 1.37 |
| | 80 | 9,066 | 58.1 | 38.4 | (7.8) | 3.1 | (0.9) | 0.4 | (0.3) | 1.74 |
| | 85 | 10,552 | 48.4 | 45.4 | (9.3) | 5.6 | (1.5) | 0.6 | (0.5) | 2.24 |
| Zambia | 60* | 1,123 | 67.3 | 31.4 | (4.4) | 1.3 | (0.4) | 0.0 | (0.0) | 1.60 |
| | 65 | 1,284 | 65.7 | 31.2 | (8.6) | 3.1 | (1.2) | 0.0 | (0.0) | 1.99 |

*(continued)*

*(Annex Table 2 continued)*

| | | | *Highest Level Attained (Percentage of the population aged 25 and over)* | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | *Population* | | | | *Second Level* | | | | *Average* |
| *Region/* | | *≥ 25* | *No* | *First Level* | | | *(2nd* | *Higher Level* | | *Years of* |
| *Country* | *Year* | *(1000s)* | *Schooling* | *Total* | *(Complete)* | *Total* | *Cycle)* | *Total* | *(Complete)* | *Schooling* |
| | 70* | 1,474 | 63.9 | 31.9 | (6.5) | 3.7 | (1.7) | 0.6 | (0.5) | 2.12 |
| | 75 | 1,684 | 59.2 | 33.7 | (6.9) | 6.7 | (2.3) | 0.5 | (0.4) | 2.56 |
| | 80 | 1,815 | 49.8 | 37.0 | (7.6) | 12.8 | (3.5) | 0.4 | (0.3) | 3.46 |
| | 85 | 2,230 | 41.0 | 45.4 | (9.3) | 12.9 | (2.8) | 0.7 | (0.5) | 3.91 |
| Zimbabwe | 60* | 1,342 | 52.3 | 45.1 | (10.0) | 0.9 | (0.1) | 1.7 | (1.3) | 1.66 |
| | 65 | 1,524 | 47.6 | 49.9 | (11.9) | 1.3 | (0.1) | 1.1 | (0.9) | 1.83 |
| | 70* | 1,742 | 43.0 | 54.6 | (9.3) | 1.9 | (0.0) | 0.6 | (0.5) | 1.86 |
| | 75 | 1,941 | 35.5 | 61.4 | (11.7) | 2.5 | (0.0) | 0.6 | (0.5) | 2.15 |
| | 80* | 2,264 | 27.8 | 68.3 | (13.6) | 3.2 | (0.1) | 0.8 | (0.7) | 2.46 |
| | 85 | 2,728 | 27.4 | 67.5 | (13.7) | 4.2 | (0.2) | 1.0 | (0.7) | 2.55 |

*Notes:* An asterisk (*) indicates that the educational attainment data for that year come from the actual census/surveys in Annex Table 1. Dashes (—) indicate that data are not available. See the text for explanation of each category and estimation method.

*Source:* Barro and Lee, 1993.

Annex Table 3: Government and Bank Expenditures on Education in 21 African countries

| | *Total Education* | *Expenditures* | *Bank Disbursements as Percent Education Budget* | |
|---|---|---|---|---|
| *Approx. Years* | *Percent of GNP* | *Percent of Budget* | *Total* | *Capital* |
| 1975 | 3.9 | 10.5 | 37.3 | 1,767.2 |
| 1980 | 4.6 | 20.0 | 14.1 | 521.0 |
| 1985 | 2.6 | 9.8 | 0.9 | 72.1 |
| 1990 | 2.7 | 13.6 | 11.9 | 1,316.3 |

*Notes:* Government expenditures are net of external assistance (which helps explain the large percentages in the last column). Bank disbursements were estimated from standard disbursement profiles applied to individual loan/credit amounts for each country. Population figures were used as weights to obtain these averages.

*Source:* UNESCO Statistical Yearbook, 1991 and Bank files.

## ANNEX TABLE 4: BANK COMMITMENTS FOR EDUCATION PROJECTS

| *Fiscal Year* | *Number of Projects* | *Current US$M* | *Constant 1990 US$M* | *% of Bank Lending* | *Per Country 1990 US$'000* | *Per Caput 1990 US$* |
|---|---|---|---|---|---|---|
| *A. Africa* | | | | | | |
| 1963 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0.00 |
| 1964 | 1 | 4.6 | 24.3 | 5.5 | 838 | 0.11 |
| 1965 | 1 | 20.0 | 102.4 | 11.9 | 3,531 | 0.44 |
| 1966 | 1 | 7.2 | 35.1 | 5.7 | 1,132 | 0.14 |
| 1967 | 3 | 23.3 | 107.1 | 14.0 | 3,455 | 0.42 |
| 1968 | 3 | 15.1 | 64.3 | 11.7 | 2,009 | 0.25 |
| 1969 | 3 | 24.2 | 93.9 | 8.4 | 2,762 | 0.38 |
| 1970 | 5 | 35.9 | 125.5 | 11.2 | 3,586 | 0.49 |
| 1971 | 7 | 31.1 | 98.1 | 8.0 | 2,725 | 0.38 |
| 1972 | 5 | 43.9 | 124.0 | 10.0 | 3,445 | 0.46 |
| 1973 | 6 | 115.2 | 290.2 | 22.2 | 8,060 | 1.05 |
| 1974 | 1 | 3.8 | 10.6 | 0.7 | 295 | 0.04 |
| 1975 | 11 | 94.0 | 201.2 | 9.0 | 5,590 | 0.69 |
| 1976 | 8 | 92.4 | 177.4 | 10.4 | 4,926 | 0.59 |
| 1977 | 5 | 51.6 | 93.5 | 5.4 | 2,461 | 0.30 |
| 1978 | 8 | 81.5 | 137.9 | 7.6 | 3,536 | 0.43 |
| 1979 | 4 | 56.5 | 91.6 | 4.7 | 2,289 | 0.28 |
| 1980 | 6 | 84.1 | 132.4 | 5.4 | 3,230 | 0.39 |
| 1981 | 7 | 182.7 | 282.9 | 10.1 | 6,579 | 0.80 |
| 1982 | 6 | 80.7 | 121.0 | 4.5 | 2,814 | 0.33 |
| 1983 | 7 | 137.3 | 197.8 | 7.7 | 4,601 | 0.52 |
| 1984 | 2 | 24.9 | 34.1 | 1.1 | 793 | 0.09 |
| 1985 | 5 | 119.0 | 153.5 | 7.5 | 3,490 | 0.37 |
| 1986 | 5 | 114.7 | 138.7 | 5.6 | 3,152 | 0.32 |
| 1987 | 6 | 104.9 | 119.6 | 5.0 | 2,718 | 0.27 |
| 1988 | 8 | 178.2 | 193.9 | 6.1 | 4,407 | 0.43 |
| 1989 | 4 | 88.1 | 92.1 | 2.2 | 2,092 | 0.20 |
| 1990 | 9 | 350.7 | 350.7 | 8.9 | 7,793 | 0.71 |
| 1991 | 7 | 265.9 | 256.4 | 7.8 | 5,573 | 0.50 |
| 1992 | 8 | 402.9 | 374.9 | 10.1 | 8,150 | 0.71 |
| Total/Average | 152 | 2,834.4 | 4,225.2 | 7.0 | 3,656 | 0.42 |
| *B. World* | | | | | | |
| 1963 | 1 | 5.0 | 27.2 | 0.7 | 358 | 0.02 |
| 1964 | 2 | 17.6 | 93.0 | 1.6 | 1,034 | 0.06 |
| 1965 | 3 | 29.5 | 151.0 | 2.2 | 1,735 | 0.09 |
| 1966 | 3 | 21.0 | 102.5 | 1.9 | 1,178 | 0.06 |
| 1967 | 6 | 51.8 | 238.2 | 4.6 | 2,646 | 0.14 |
| 1968 | 5 | 24.2 | 103.1 | 2.5 | 1,146 | 0.06 |
| 1969 | 10 | 81.8 | 317.5 | 4.6 | 3,451 | 0.18 |

| *Fiscal Year* | *Number of Projects* | *Current US$M* | *Constant 1990 US$M* | *% of Bank Lending* | *Per Country 1990 US$'000* | *Per Caput 1990 US$* |
|---|---|---|---|---|---|---|
| 1970 | 11 | 79.9 | 279.4 | 3.7 | 2,941 | 0.16 |
| 1971 | 14 | 107.9 | 340.4 | 4.4 | 3,473 | 0.18 |
| 1972 | 14 | 180.4 | 509.6 | 6.1 | 5,148 | 0.28 |
| 1973 | 18 | 287.2 | 723.3 | 8.4 | 7,161 | 0.37 |
| 1974 | 10 | 152.2 | 344.3 | 3.5 | 3,376 | 0.17 |
| 1975 | 19 | 220.4 | 462.4 | 3.8 | 4,533 | 0.22 |
| 1976 | 20 | 321.3 | 616.7 | 4.8 | 5,930 | 0.29 |
| 1977 | 16 | 288.1 | 518.1 | 4.1 | 4,888 | 0.24 |
| 1978 | 20 | 351.9 | 595.4 | 4.2 | 5,617 | 0.27 |
| 1979 | 18 | 496.0 | 803.9 | 5.0 | 7,513 | 0.36 |
| 1980 | 13 | 440.1 | 693.1 | 3.8 | 6,358 | 0.21 |
| 1981 | 18 | 734.4 | 1,133.0 | 6.0 | 10,207 | 0.34 |
| 1982 | 19 | 526.4 | 789.2 | 4.0 | 6,923 | 0.23 |
| 1983 | 21 | 547.9 | 789.5 | 3.8 | 6,865 | 0.23 |
| 1984 | 20 | 698.9 | 961.5 | 4.5 | 8,289 | 0.27 |
| 1985 | 19 | 927.8 | 1,197.2 | 6.4 | 10,145 | 0.33 |
| 1986 | 17 | 829.2 | 1,002.7 | 5.1 | 8,356 | 0.27 |
| 1987 | 14 | 439.6 | 501.5 | 2.5 | 4,144 | 0.13 |
| 1988 | 19 | 864.0 | 940.2 | 4.5 | 7,770 | 0.24 |
| 1989 | 20 | 963.6 | 1,005.8 | 4.5 | 8,313 | 0.25 |
| 1990 | 21 | 1,486.6 | 1,486.6 | 7.2 | 12,086 | 0.37 |
| 1991 | 26 | 2,251.7 | 2,170.9 | 9.9 | 17,094 | 0.52 |
| 1992 | 26 | 1,883.7 | 1,752.7 | 8.7 | 13,482 | 0.40 |
| Total/Average | 443 | 15,310.1 | 20,649.7 | 4.9 | 6,072 | 0.23 |

### ANNEX TABLE 5: BANK COMMITMENTS FOR EDUCATION PROJECTS BY LEVEL OF EDUCATION

| *Fiscal Year* | *Bank Lending in Constant 1990 US$M* | *Share of Commitments for Education Projects (%)* | | | | |
|---|---|---|---|---|---|---|
| | | *Primary* | *Secondary* | *Tertiary* | *Teacher Training* | *Other* |
| *A. Africa* | | | | | | |
| 1963 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1964 | 24.3 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
| 1965 | 102.4 | 1.1 | 90.0 | 0.0 | 8.8 | 0.0 |
| 1966 | 35.1 | 0.0 | 77.5 | 8.5 | 5.0 | 9.0 |
| 1967 | 107.1 | 15.1 | 69.9 | 0.0 | 15.1 | 0.0 |
| 1968 | 64.3 | 3.8 | 69.9 | 0.0 | 20.5 | 5.8 |
| 1969 | 93.9 | 8.2 | 72.7 | 4.0 | 10.3 | 4.7 |
| 1970 | 125.5 | 9.9 | 43.1 | 24.6 | 11.0 | 11.4 |
| 1971 | 98.1 | 12.6 | 32.0 | 10.3 | 19.2 | 25.8 |
| 1972 | 124.0 | 12.7 | 56.8 | 3.6 | 16.6 | 10.3 |
| 1973 | 290.2 | 10.6 | 48.8 | 19.3 | 12.0 | 9.3 |
| 1974 | 10.6 | 4.2 | 0.0 | 0.0 | 4.2 | 91.5 |
| 1975 | 201.2 | 20.9 | 23.9 | 6.5 | 4.6 | 44.2 |
| 1976 | 177.4 | 23.4 | 29.8 | 5.7 | 21.8 | 19.3 |
| 1977 | 93.5 | 17.6 | 4.1 | 10.1 | 27.6 | 40.7 |
| 1978 | 137.9 | 28.1 | 23.6 | 24.1 | 2.5 | 21.6 |
| 1979 | 91.6 | 20.8 | 13.2 | 22.7 | 24.1 | 19.2 |
| 1980 | 132.4 | 18.3 | 11.3 | 2.6 | 15.2 | 52.5 |
| 1981 | 282.9 | 12.3 | 39.3 | 27.0 | 7.8 | 13.6 |
| 1982 | 121.0 | 36.3 | 29.1 | 2.6 | 19.6 | 12.3 |
| 1983 | 197.8 | 47.8 | 8.9 | 2.7 | 19.5 | 21.1 |
| 1984 | 34.1 | 16.5 | 0.0 | 19.2 | 20.6 | 43.8 |
| 1985 | 153.5 | 33.9 | 16.7 | 2.5 | 21.7 | 25.3 |
| 1986 | 138.7 | 33.6 | 20.6 | 3.9 | 23.8 | 18.1 |
| 1987 | 119.6 | 42.4 | 10.7 | 18.8 | 5.5 | 22.6 |
| 1988 | 193.9 | 29.0 | 13.5 | 44.6 | 3.7 | 9.2 |
| 1989 | 92.1 | 51.9 | 2.3 | 6.5 | 0.0 | 39.2 |
| 1990 | 350.7 | 23.5 | 17.1 | 39.0 | 4.3 | 16.1 |
| 1991 | 256.4 | 72.3 | 6.3 | 5.0 | 5.2 | 11.2 |
| 1992 | 374.9 | 7.6 | 1.7 | 14.7 | 1.0 | 75.0 |
| Total/ Average | 4,225 | 24.2 | 26.9 | 14.3 | 11.3 | 23.3 |
| *B. World* | | | | | | |
| 1963 | 27.2 | 0.0 | 88.0 | 0.0 | 12.0 | 0.0 |
| 1964 | 93.0 | 0.0 | 35.1 | 62.2 | 2.7 | 0.0 |
| 1965 | 151.0 | 2.1 | 70.3 | 18.9 | 8.6 | 0.0 |
| 1966 | 102.5 | 0.0 | 82.6 | 2.9 | 1.7 | 12.7 |
| 1967 | 238.2 | 8.3 | 79.9 | 2.9 | 9.0 | 0.0 |
| 1968 | 103.1 | 8.6 | 73.8 | 0.0 | 15.2 | 2.3 |

| | | *Share of Commitments for Education Projects (%)* | | | | |
|---|---|---|---|---|---|---|
| *Fiscal Year* | *Bank Lending in Constant 1990 US$M* | *Primary* | *Secondary* | *Tertiary* | *Teacher Training* | *Other* |
| 1969 | 317.5 | 4.0 | 76.9 | 4.2 | 6.0 | 9.0 |
| 1970 | 279.4 | 10.7 | 40.6 | 27.6 | 6.5 | 14.5 |
| 1971 | 340.4 | 12.6 | 38.4 | 18.9 | 11.6 | 18.4 |
| 1972 | 509.6 | 4.5 | 43.2 | 36.6 | 7.8 | 7.9 |
| 1973 | 723.3 | 13.3 | 31.7 | 36.6 | 8.6 | 9.8 |
| 1974 | 344.3 | 11.5 | 40.2 | 27.1 | 5.4 | 15.8 |
| 1975 | 462.4 | 13.7 | 35.1 | 13.2 | 3.8 | 34.3 |
| 1976 | 616.7 | 14.5 | 27.4 | 17.9 | 11.0 | 29.1 |
| 1977 | 518.1 | 18.8 | 17.5 | 16.1 | 15.4 | 32.2 |
| 1978 | 595.4 | 11.6 | 16.2 | 42.4 | 7.3 | 22.5 |
| 1979 | 803.9 | 14.5 | 26.0 | 19.8 | 9.4 | 30.3 |
| 1980 | 693.1 | 17.6 | 7.3 | 35.9 | 7.4 | 31.8 |
| 1981 | 1,133.0 | 20.8 | 10.0 | 42.7 | 2.7 | 23.8 |
| 1982 | 789.2 | 17.2 | 21.4 | 8.8 | 22.7 | 29.9 |
| 1983 | 789.5 | 21.6 | 6.1 | 38.8 | 8.6 | 24.8 |
| 1984 | 961.5 | 8.5 | 15.9 | 44.9 | 4.6 | 26.1 |
| 1985 | 1,197.2 | 17.5 | 10.8 | 45.6 | 6.8 | 19.3 |
| 1986 | 1,002.7 | 21.1 | 13.7 | 30.7 | 13.2 | 21.3 |
| 1987 | 501.5 | 41.6 | 4.5 | 5.7 | 13.3 | 35.0 |
| 1988 | 940.2 | 13.1 | 10.0 | 40.1 | 12.5 | 24.3 |
| 1989 | 1,005.8 | 38.1 | 14.4 | 14.0 | 3.3 | 30.2 |
| 1990 | 1,486.6 | 24.2 | 16.1 | 32.9 | 10.0 | 16.8 |
| 1991 | 2,170.9 | 29.3 | 13.4 | 41.6 | 4.7 | 11.0 |
| 1992 | 1,752.7 | 29.2 | 8.2 | 25.6 | 6.6 | 30.3 |
| Total/ Average | 20,649.7 | 19.8 | 19.7 | 30.0 | 8.4 | 22.1 |

## Annex Table 6: Bank Commitments for Education Projects by Category of Expenditure

| Fiscal Year | Bank Lending in Constant 1990 US$M | Civil Works (%) | *Share of Commitments for Education Projects (%)* | | | | |
|---|---|---|---|---|---|---|---|
| | | | *Furniture, Equipment & Vehicles* | *Textbooks & Educational Materials* | *Technical Assistance & Training* | *Budgetary Support* | *Other Expenses* |
| *A. Africa* | | | | | | | |
| 1963 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1964 | 24.3 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1965 | 102.4 | 84.3 | 15.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1966 | 35.1 | 70.5 | 29.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1967 | 107.1 | 89.9 | 9.7 | 0.0 | 0.1 | 0.0 | 0.3 |
| 1968 | 64.3 | 69.0 | 18.0 | 0.0 | 12.9 | 0.0 | 0.0 |
| 1969 | 93.9 | 76.3 | 23.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1970 | 125.5 | 69.3 | 23.3 | 0.0 | 6.0 | 0.0 | 1.5 |
| 1971 | 98.1 | 52.8 | 26.1 | 0.0 | 20.3 | 0.0 | 0.8 |
| 1972 | 124.0 | 61.9 | 26.5 | 0.0 | 9.0 | 0.0 | 2.7 |
| 1973 | 290.2 | 67.5 | 22.2 | 0.0 | 9.0 | 0.0 | 1.4 |
| 1974 | 10.6 | 17.9 | 15.9 | 0.0 | 61.5 | 0.0 | 4.7 |
| 1975 | 201.2 | 60.4 | 25.0 | 0.0 | 11.0 | 0.0 | 3.7 |
| 1976 | 177.4 | 55.3 | 27.8 | 0.7 | 14.1 | 0.0 | 2.1 |
| 1977 | 93.5 | 51.8 | 24.5 | 0.0 | 21.2 | 0.0 | 2.6 |
| 1978 | 137.9 | 60.2 | 19.6 | 0.0 | 16.2 | 0.0 | 4.0 |
| 1979 | 91.6 | 51.9 | 25.2 | 0.0 | 21.4 | 0.0 | 1.4 |
| 1980 | 132.4 | 60.3 | 22.5 | 0.6 | 11.2 | 0.0 | 5.4 |
| 1981 | 282.9 | 59.5 | 21.9 | 1.8 | 13.6 | 0.0 | 3.1 |
| 1982 | 121.0 | 64.8 | 15.3 | 1.8 | 15.6 | 0.0 | 2.6 |
| 1983 | 197.8 | 46.2 | 20.3 | 10.1 | 16.1 | 0.0 | 7.3 |
| 1984 | 34.1 | 11.1 | 52.0 | 0.0 | 32.5 | 0.0 | 4.4 |
| 1985 | 153.5 | 50.6 | 25.0 | 1.7 | 15.2 | 0.0 | 7.5 |
| 1986 | 138.7 | 54.4 | 23.5 | 1.6 | 16.4 | 0.0 | 4.1 |
| 1987 | 119.6 | 31.7 | 15.6 | 2.4 | 37.1 | 0.0 | 13.2 |
| 1988 | 193.9 | 34.7 | 28.4 | 3.8 | 25.8 | 0.0 | 7.3 |
| 1989 | 92.1 | 20.2 | 12.3 | 24.1 | 22.6 | 0.0 | 20.8 |
| 1990 | 350.7 | 14.4 | 21.1 | 17.1 | 17.8 | 20.1 | 9.4 |
| 1991 | 256.4 | 22.6 | 20.1 | 39.0 | 13.2 | 0.0 | 5.2 |
| 1992 | 374.9 | 7.7 | 14.7 | 2.3 | 10.1 | 62.0 | 3.2 |
| Total/Average | 4,225.2 | 47.1 | 21.4 | 5.6 | 14.1 | 7.3 | 4.6 |
| *B. World* | | | | | | | |
| 1963 | 27.2 | 71.3 | 28.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1964 | 93.0 | 80.0 | 17.3 | 0.0 | 2.7 | 0.0 | 0.0 |
| 1965 | 151.0 | 82.7 | 16.0 | 0.0 | 1.4 | 0.0 | 0.0 |
| 1966 | 102.5 | 67.7 | 32.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1967 | 238.2 | 77.8 | 20.3 | 0.0 | 1.7 | 0.0 | 0.1 |

|  |  |  | Share of Commitments for Education Projects (%) |  |  |  |  |
|---|---|---|---|---|---|---|---|
| Fiscal Year | Bank Lending in Constant 1990 US$M | Civil Works (%) | Furniture, Equipment & Vehicles | Textbooks & Educational Materials | Technical Assistance & Training | Budgetary Support | Other Expenses |
| 1968 | 103.1 | 69.2 | 24.1 | 0.0 | 6.4 | 0.0 | 0.3 |
| 1969 | 317.5 | 69.7 | 28.0 | 0.0 | 1.7 | 0.0 | 0.5 |
| 1970 | 279.4 | 58.8 | 34.3 | 0.3 | 5.8 | 0.0 | 0.7 |
| 1971 | 340.4 | 46.4 | 42.1 | 0.0 | 10.0 | 0.0 | 1.4 |
| 1972 | 509.6 | 49.2 | 41.3 | 0.0 | 8.8 | 0.0 | 0.7 |
| 1973 | 723.3 | 45.8 | 40.1 | 3.5 | 7.3 | 0.0 | 3.3 |
| 1974 | 344.3 | 55.8 | 37.4 | 0.0 | 6.1 | 0.0 | 0.7 |
| 1975 | 462.4 | 61.3 | 28.9 | 0.0 | 7.7 | 0.0 | 2.1 |
| 1976 | 616.7 | 50.9 | 31.5 | 5.4 | 11.1 | 0.0 | 1.1 |
| 1977 | 518.1 | 46.7 | 39.1 | 0.2 | 12.0 | 0.0 | 2.0 |
| 1978 | 595.4 | 45.5 | 42.5 | 0.0 | 9.9 | 0.0 | 2.1 |
| 1979 | 803.9 | 41.0 | 40.9 | 0.3 | 13.4 | 0.0 | 4.5 |
| 1980 | 693.1 | 39.6 | 40.9 | 2.1 | 14.5 | 0.0 | 2.9 |
| 1981 | 1,133.0 | 23.4 | 53.0 | 3.3 | 17.5 | 0.0 | 2.7 |
| 1982 | 789.2 | 44.3 | 38.6 | 3.2 | 12.8 | 0.0 | 1.0 |
| 1983 | 789.5 | 29.2 | 39.6 | 4.2 | 23.9 | 0.0 | 3.1 |
| 1984 | 961.5 | 25.8 | 48.5 | 2.6 | 14.0 | 0.0 | 9.1 |
| 1985 | 1,197.2 | 21.6 | 46.4 | 3.7 | 21.4 | 0.0 | 6.9 |
| 1986 | 1,002.7 | 27.6 | 33.7 | 0.9 | 34.9 | 0.0 | 2.8 |
| 1987 | 501.5 | 34.2 | 32.9 | 3.3 | 16.7 | 0.0 | 12.9 |
| 1988 | 940.2 | 25.3 | 35.5 | 3.3 | 32.3 | 0.0 | 3.5 |
| 1989 | 1,005.8 | 37.4 | 37.0 | 5.1 | 9.9 | 0.0 | 10.7 |
| 1990 | 1,486.6 | 24.0 | 31.5 | 8.1 | 23.6 | 4.7 | 8.2 |
| 1991 | 2,170.9 | 26.6 | 40.8 | 10.7 | 16.3 | 0.0 | 5.5 |
| 1992 | 1,752.7 | 23.0 | 27.7 | 5.1 | 18.6 | 13.2 | 12.4 |
| Total/Average | 20,649.7 | 35.3 | 37.8 | 3.8 | 16.4 | 1.5 | 5.2 |

## ANNEX TABLE 7: HIGHER EDUCATION LENDING IN AFRICA AND REST OF WORLD

| | *Per Capita US$, 1990 Prices* | | | | |
|---|---|---|---|---|---|
| | *1963–68* | *1969–79* | *1980–87* | *1988–92* | *Total* |
| Africa | 0.07 | 0.93 | 0.51 | 0.64 | 2.37 |
| Universities | | 0.38 | 0.10 | 0.54 | 1.24 |
| Teacher Training | 0.06 | 0.21 | 0.17 | 0.02 | 0.44 |
| Other Institutes | 0.01 | 0.34 | 0.24 | 0.08 | 0.70 |
| Rest of World | 0.07 | 0.78 | 0.86 | 0.65 | 2.76 |
| Universities | 0.05 | 0.38 | 0.50 | 0.18 | 1.25 |
| Teacher Training | 0.01 | 0.06 | 0.10 | 0.06 | 0.27 |
| Other Institutes | 0.01 | 0.34 | 0.25 | 0.42 | 1.24 |
| | *Percent of Total Education Lending* | | | | |
| | *1963–68* | *1969–79* | *1980–87* | *1988–92* | *Total* |
| Africa | 5.3 | 19.1 | 16.7 | 24.2 | 20.4 |
| Universities | 0.0 | 7.5 | 3.8 | 20.7 | 12.2 |
| Teacher Training | 4.3 | 4.6 | 5.6 | 0.6 | 3.1 |
| Other Institutes | 1.0 | 7.0 | 7.2 | 3.0 | 5.1 |
| Rest of World | 24.9 | 31.4 | 44.3 | 37.6 | 38.9 |
| Universities | 17.1 | 14.5 | 25.6 | 10.0 | 16.1 |
| Teacher Training | 3.6 | 2.3 | 5.5 | 3.2 | 3.8 |
| Other Institutes | 4.1 | 14.6 | 13.2 | 24.4 | 18.9 |
| | *Regional Shares (%)* | | | | |
| | *1963–68* | *1969–79* | *1980–87* | *1988–92* | *Total* |
| Africa | 14.6 | 16.7 | 6.9 | 11.9 | 11.0 |
| Universities | 0.0 | 14.4 | 2.5 | 29.5 | 12.5 |
| Teacher Training | 49.0 | 38.3 | 17.2 | 3.6 | 18.9 |
| Other Institutes | 16.4 | 14.3 | 10.5 | 2.7 | 7.5 |
| Rest of World | 85.4 | 83.3 | 93.1 | 88.1 | 89.0 |
| Universities | 100.0 | 85.6 | 97.5 | 70.5 | 87.5 |
| Teacher Training | 51.0 | 61.7 | 82.8 | 96.4 | 81.1 |
| Other Institutes | 83.6 | 85.7 | 89.5 | 97.3 | 92.5 |

## ANNEX TABLE 8: BANK COMMITMENTS FOR TECHNICAL ASSISTANCE PROJECTS AND COMPONENTS

| *Fiscal Year* | *Current US$M* | *Constant 1990 US$M* | *% of Bank Lending* | *Per Country 1990 US$'000* | *Per Caput 1990 US$* |
|---|---|---|---|---|---|
| *A. Africa* | | | | | |
| 1969 | 10.0 | 10.0 | 10.0 | 1,141 | 0.16 |
| 1970 | 14.0 | 14.0 | 14.0 | 1,394 | 0.19 |
| 1971 | 10.7 | 10.7 | 10.7 | 940 | 0.13 |
| 1972 | 29.0 | 29.0 | 29.0 | 2,279 | 0.31 |
| 1973 | 28.8 | 28.8 | 28.8 | 2,015 | 0.26 |
| 1974 | 27.9 | 27.9 | 27.9 | 1,753 | 0.22 |
| 1975 | 41.9 | 41.9 | 41.9 | 2,407 | 0.30 |
| 1976 | 63.2 | 63.2 | 63.2 | 3,372 | 0.40 |
| 1977 | 65.9 | 65.9 | 65.9 | 3,112 | 0.38 |
| 1978 | 92.7 | 92.7 | 92.7 | 4,023 | 0.49 |
| 1979 | 131.4 | 131.4 | 131.4 | 5,326 | 0.65 |
| 1980 | 211.9 | 211.9 | 211.9 | 8,138 | 0.97 |
| 1981 | 382.9 | 382.9 | 382.9 | 13,722 | 1.66 |
| 1982 | 349.8 | 349.8 | 349.8 | 12,197 | 1.43 |
| 1983 | 370.4 | 370.4 | 370.4 | 12,413 | 1.41 |
| 1984 | 463.6 | 463.6 | 463.6 | 14,770 | 1.63 |
| 1985 | 366.0 | 366.0 | 366.0 | 10,733 | 1.14 |
| 1986 | 345.0 | 345.0 | 345.0 | 9,482 | 0.97 |
| 1987 | 385.8 | 385.8 | 385.8 | 9,997 | 1.00 |
| 1988 | 466.6 | 466.6 | 466.6 | 11,539 | 1.11 |
| 1989 | 561.9 | 561.9 | 561.9 | 13,329 | 1.25 |
| 1990 | 547.5 | 547.5 | 547.5 | 12,167 | 1.10 |
| 1991 | 531.9 | 531.9 | 531.9 | 11,149 | 1.00 |
| 1992 | 650.4 | 650.4 | 650.4 | 13,156 | 1.14 |
| Total/Average | 6,149.4 | 7,741.4 | 12.9 | 7,523 | 1.00 |
| *B. World* | | | | | |
| 1969 | 47.4 | 183.9 | 2.7 | 1,999 | 0.11 |
| 1970 | 40.6 | 142.1 | 1.9 | 1,495 | 0.08 |
| 1971 | 53.7 | 169.2 | 2.2 | 1,727 | 0.09 |
| 1972 | 78.2 | 220.8 | 2.6 | 2,230 | 0.12 |
| 1973 | 91.3 | 229.8 | 2.7 | 2,276 | 0.12 |
| 1974 | 120.7 | 273.1 | 2.8 | 2,677 | 0.14 |
| 1975 | 167.8 | 346.8 | 2.8 | 3,400 | 0.17 |
| 1976 | 252.6 | 484.9 | 3.8 | 4,662 | 0.23 |
| 1977 | 211.6 | 379.9 | 3.0 | 3,584 | 0.18 |
| 1978 | 266.9 | 451.6 | 3.2 | 4,261 | 0.20 |
| 1979 | 406.7 | 659.2 | 4.1 | 6,161 | 0.29 |
| 1980 | 878.7 | 1,383.8 | 7.7 | 12,695 | 0.42 |

*(continued)*

*(Annex Table 8 continued)*

| *Fiscal Year* | *Current US$M* | *Constant 1990 US$M* | *% of Bank Lending* | *Per Country 1990 US$'000* | *Per Caput 1990 US$* |
|---|---|---|---|---|---|
| 1981 | 1,140.2 | 1,756.9 | 9.3 | 15,828 | 0.53 |
| 1982 | 1,251.8 | 1,876.7 | 9.6 | 16,462 | 0.56 |
| 1983 | 1,363.3 | 1,964.5 | 9.4 | 17,082 | 0.57 |
| 1984 | 1,257.2 | 1,722.1 | 8.1 | 14,846 | 0.49 |
| 1985 | 1,288.2 | 1,662.2 | 9.0 | 14,086 | 0.46 |
| 1986 | 1,304.0 | 1,576.8 | 8.0 | 13,140 | 0.42 |
| 1987 | 1,172.5 | 1,337.0 | 6.6 | 11,049 | 0.35 |
| 1988 | 1,281.3 | 1,394.2 | 6.7 | 11,522 | 0.36 |
| 1989 | 1,270.6 | 1,326.3 | 5.9 | 10,961 | 0.34 |
| 1990 | 1,660.4 | 1,660.4 | 8.0 | 13,499 | 0.41 |
| 1991 | 1,940.4 | 1,870.8 | 8.6 | 14,731 | 0.45 |
| 1992 | 1,835.5 | 1,707.8 | 8.5 | 13,137 | 0.39 |
| Total / Average | 19,381.4 | 24,847.8 | 5.9 | 8,896 | 0.00 |

## ANNEX TABLE 9: BANK COMMITMENTS FOR TECHNICAL ASSISTANCE PROJECTS AND COMPONENTS BY TYPE (PERCENT)

| *Fiscal Year* | *Total (1990 US$M)* | *TA Projects* | *Training Components* | *Technical & Feasibility Studies* | *Experts & Consultants* | *Supervision/ Implementation/ Engineering* | *Technical Assistance Grants* | *PPFs* | *Special PPFs* |
|---|---|---|---|---|---|---|---|---|---|
| *A. Africa* | | | | | | | | | |
| 1961–68 | 11.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| 1969 | 38.8 | 0.0 | 2.5 | 19.9 | 75.6 | 0.0 | 2.0 | 0.0 | 0.0 |
| 1970 | 48.8 | 0.0 | 3.2 | 27.7 | 67.9 | 0.0 | 1.3 | 0.0 | 0.0 |
| 1971 | 33.8 | 0.0 | 0.7 | 5.4 | 93.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1972 | 82.0 | 0.0 | 4.5 | 35.3 | 60.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1973 | 72.5 | 0.0 | 5.2 | 24.1 | 70.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1974 | 63.1 | 0.0 | 19.0 | 30.9 | 48.7 | 0.0 | 1.4 | 0.0 | 0.0 |
| 1975 | 86.7 | 0.0 | 23.5 | 20.9 | 55.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1976 | 121.4 | 21.3 | 22.9 | 22.5 | 32.0 | 0.0 | 0.0 | 1.3 | 0.0 |
| 1977 | 118.3 | 18.8 | 20.0 | 16.1 | 38.3 | 0.0 | 0.0 | 6.8 | 0.0 |
| 1978 | 156.9 | 14.9 | 24.6 | 12.3 | 42.2 | 0.0 | 0.0 | 5.9 | 0.0 |
| 1979 | 213.0 | 12.7 | 19.7 | 9.7 | 50.0 | 0.0 | 0.0 | 7.8 | 0.0 |
| 1980 | 333.6 | 9.8 | 18.9 | 8.2 | 37.9 | 16.3 | 0.0 | 8.8 | 0.0 |
| 1981 | 590.0 | 27.9 | 11.3 | 11.5 | 32.8 | 10.4 | 0.0 | 6.1 | 0.0 |
| 1982 | 524.5 | 16.2 | 9.8 | 16.0 | 35.8 | 16.4 | 0.0 | 5.8 | 0.0 |
| 1983 | 533.8 | 8.6 | 14.9 | 18.9 | 33.7 | 16.0 | 0.0 | 7.9 | 0.0 |
| 1984 | 635.1 | 17.4 | 13.6 | 9.4 | 34.7 | 20.0 | 0.0 | 4.9 | 0.0 |
| 1985 | 472.3 | 20.6 | 13.5 | 10.4 | 32.7 | 15.9 | 0.0 | 6.2 | 0.6 |
| 1986 | 417.2 | 16.9 | 18.3 | 11.2 | 33.3 | 11.5 | 0.0 | 7.9 | 1.0 |
| 1987 | 439.9 | 13.1 | 16.3 | 10.6 | 33.8 | 11.3 | 0.0 | 14.0 | 0.9 |
| 1988 | 507.7 | 20.5 | 14.2 | 5.6 | 34.3 | 12.4 | 0.0 | 12.2 | 0.8 |
| 1989 | 586.5 | 25.7 | 14.0 | 7.1 | 34.7 | 10.6 | 0.0 | 7.2 | 0.6 |
| 1990 | 547.5 | 10.2 | 20.5 | 5.9 | 42.4 | 12.1 | 0.0 | 8.3 | 0.5 |
| 1991 | 512.8 | 13.3 | 23.9 | 3.5 | 35.3 | 14.9 | 0.0 | 8.5 | 0.5 |
| 1992 | 605.2 | 13.5 | 13.9 | 9.8 | 38.9 | 16.6 | 0.0 | 7.0 | 0.2 |
| Total | 7,752.7 | 15.8 | 15.6 | 11.0 | 37.5 | 12.3 | 0.2 | 7.3 | 0.3 |
| *B.World* | | | | | | | | | |
| 1961–68 | 67.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| 1969 | 183.9 | 15.8 | 3.2 | 19.3 | 61.0 | 0.0 | 0.7 | 0.0 | 0.0 |
| 1970 | 142.1 | 0.0 | 5.3 | 37.6 | 56.6 | 0.0 | 0.4 | 0.0 | 0.0 |
| 1971 | 169.2 | 7.5 | 8.2 | 9.7 | 74.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1972 | 220.8 | 5.1 | 9.5 | 24.5 | 60.6 | 0.0 | 0.3 | 0.0 | 0.0 |
| 1973 | 229.8 | 4.4 | 14.5 | 27.7 | 53.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1974 | 273.1 | 17.4 | 20.2 | 29.5 | 32.4 | 0.0 | 0.5 | 0.0 | 0.0 |
| 1975 | 346.8 | 4.8 | 20.6 | 14.8 | 59.8 | 0:0 | 0.0 | 0.0 | 0.0 |
| 1976 | 484.9 | 13.1 | 26.3 | 21.9 | 38.0 | 0.0 | 0.0 | 0.6 | 0.0 |
| 1977 | 379.9 | 8.0 | 23.6 | 29.6 | 36.2 | 0.0 | 0.0 | 2.6 | 0.0 |

*(continued)*

*(Annex Table 9 continued)*

| *Fiscal Year* | *Total (1990 US$M)* | *TA Projects* | *Training Components* | *Technical & Feasibility Studies* | *Experts & Consultants* | *Supervision/ Implementation/ Engineering* | *Technical Assistance Grants* | *PPFs* | *Special PPFs* |
|---|---|---|---|---|---|---|---|---|---|
| 1978 | 451.6 | 10.8 | 24.2 | 19.9 | 42.1 | 0.0 | 0.0 | 3.0 | 0.0 |
| 1979 | 659.2 | 11.7 | 20.4 | 7.6 | 56.9 | 0.0 | 0.0 | 3.4 | 0.0 |
| 1980 | 1,383.8 | 5.4 | 16.9 | 4.8 | 32.8 | 37.3 | 0.0 | 2.8 | 0.0 |
| 1981 | 1,756.9 | 11.5 | 15.6 | 17.3 | 27.3 | 25.5 | 0.0 | 2.8 | 0.0 |
| 1982 | 1,876.7 | 5.8 | 14.8 | 18.2 | 32.7 | 26.2 | 0.0 | 2.3 | 0.0 |
| 1983 | 1,964.5 | 3.9 | 16.9 | 28.0 | 23.5 | 25.1 | 0.0 | 2.6 | 0.0 |
| 1984 | 1,722.1 | 10.7 | 20.6 | 17.1 | 28.0 | 21.2 | 0.0 | 2.3 | 0.0 |
| 1985 | 1,662.2 | 8.7 | 25.8 | 19.8 | 24.5 | 19.0 | 0.0 | 2.0 | 0.2 |
| 1986 | 1,576.8 | 10.6 | 32.3 | 12.0 | 24.4 | 17.6 | 0.0 | 2.8 | 0.3 |
| 1987 | 1,337.0 | 8.9 | 22.3 | 15.9 | 24.2 | 22.6 | 0.0 | 5.8 | 0.3 |
| 1988 | 1,394.2 | 7.5 | 28.2 | 7.5 | 33.4 | 17.6 | 0.0 | 5.5 | 0.3 |
| 1989 | 1,326.3 | 17.2 | 21.6 | 5.8 | 28.7 | 22.5 | 0.0 | 3.9 | 0.3 |
| 1990 | 1,660.4 | 8.5 | 32.4 | 5.9 | 32.6 | 16.9 | 0.0 | 3.6 | 0.2 |
| 1991 | 1,870.8 | 9.6 | 36.1 | 6.2 | 32.6 | 12.0 | 0.0 | 3.4 | 0.1 |
| 1992 | 1,707.8 | 10.7 | 22.9 | 9.7 | 33.2 | 20.0 | 0.0 | 3.5 | 0.1 |
| Total | 24,847.8 | 9.1 | 22.8 | 14.3 | 31.9 | 18.5 | 0.3 | 3.0 | 0.1 |

## Annex Table 10: Performance Ratings for all, Education, and Technical Assistance Projects by Year of Approval, 1968–85

| | *All Projects* | | *Education Projects* | | *Technical Assistance* | |
|---|---|---|---|---|---|---|
| | *Africa* | *Total* | *Africa* | *Total* | *Africa* | *Total* |
| *Percent Satisfactory* | | | | | | |
| 1968–73 | 78.08 | 84.81 | 78.57 | 87.84 | 0.00 | 100.00 |
| 1974–80 | 58.69 | 72.44 | 76.74 | 78.57 | 52.63 | 66.67 |
| 1981–85 | 67.19 | 70.58 | 68.00 | 76.56 | 68.18 | 67.57 |
| Overall | 65.69 | 74.96 | 75.00 | 80.80 | 60.98 | 69.44 |
| *Number of Projects* | | | | | | |
| 1968–73 | 219 | 711 | 28 | 74 | 0 | 5 |
| 1974–80 | 443 | 1,495 | 43 | 112 | 19 | 30 |
| 1981–85 | 256 | 741 | 25 | 64 | 22 | 37 |
| Overall | 918 | 2,947 | 96 | 250 | 41 | 72 |

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